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A QUARTERLY JOURNAL

OF

SKIN AND VENEREAL DISEASES.

L. DUNCAN BULKLEY, A.M., M.D.

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DR. DUHRING'S CASE OF

A BEARDED WOMAN.

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ARCHIVES OF DERMATOLOGY.

APRIL, 1877.

Original Communications.

CASE OF A BEARDED WOMAN.

BY LOUIS A. DUHRING, M. D.,

Professor of Skin Diseases in the Hospital of the University of Pennsylvania.

THE case whose portrait accompanies these notes was recently shown to the medical class of the University of Pennsylvania, and, in connection with remarks upon hypertrophy of the hair in general, was made the subject of a clinical lecture. The growth is such an unusual one, and the deformity so striking, that it appears to me to be worthy of detailed description and a place upon record.

Previous History.—Her name is Mrs. Viola M——. She was born in the town of Wilcox, Elk Co., Pennsylvania, in 1854, and is now, therefore, twenty-three years old. At birth, according to the statement of her parents, both of whom are living, she had a very light, whitish downy growth of hair over the regions of the face that are now hirsute. The rest of the face and the body showed no sign of hair. During the first month this in a measure wore off, but a few months later returned and began to grow stronger. The scalp possessed no more hair than is common to the majority of children at birth. At the age of three years, we are informed, considerable hair was present over the sides of the cheeks, after the manner of whiskers, as light, flaxen lanugo. The hair of the scalp at this age was light brownish in color. Throughout her childhood she was weakly, and her general condition below the average. She was frail, spare and delicate, and ailed from time to time with various complaints. The hair upon her face, however, continued to increase in quantity and in length perceptibly from year to year. As

a child she was extremely modest, shy, and diffident, and never exhibited any signs of precocity.

At about the age of ten the hair of the face began to grow more vigorously, the cheeks, chin and upper portion of neck showing an abundant production. The hair upon the upper lip now first manifested itself in a notable manner, and in a short time became brownish in color. At twelve, the hair of the scalp was quite long, extending to the hips, but it was by no means thick, and was not considered a full head of hair. She was at this period seized with a severe fever, during the course of which the hair of the scalp was sacrificed and cut short. After recovery it began to grow again, but only very slowly, and has never reached its former length.

Menstruation set in naturally at the age of fourteen, and was unattended by any unusual phenomena. From this date her general health improved, and in the course of a few years from a delicate child she appeared quite hearty. The establishment of this function, which at once became regular and normal in all respects, did not exert any perceptible influence upon the growth of the hair of the face. It neither grew more rapidly nor did it become coarser in texture. Upon this point I have questioned her closely, but she is quite sure of the correctness of the statement. With puberty hair first manifested itself in the axillæ and on the pubes. It also now appeared upon certain regions of the trunk, and upon the extremities, in the form of stout lanugo. The mammæ enlarged and soon attained the development common to the majority of young women. They were neither full, nor on the other hand small, but, she thinks, of medium size. At sixteen, two years after the establishment of menstruation, another start in the growth of the hair of the face took place, the hair becoming more abundant, longer, stouter, and darker in color. At eighteen it had reached its greatest development,—the condition in which it now exists. It has undergone no appreciable change during the last five years. It has never been cut, shaved, nor in any way operated upon, as, for example, with depilatories.

She was married at the age of seventeen-and-a-half to her present husband (who, it may be remarked, possesses no peculiarities), by whom she has had two children, one a boy, the other a girl. They were born at full term, the labor with both having been easy and perfectly normal. The children were well developed and showed no signs whatsoever of the mother's deformity. They lived to the ages of two and four years, respectively, and died within a short time of each other, in September last, of scarlatina. Up to the period of their decease they had manifested no tendency to any unusual development of hair, either upon the scalp or elsewhere. During gestation no changes in the growth or condition of the hair were observed. She was able to nurse her children for about a month, when the milk began to fail. It so happened with both children.

Her voice has always been feminine. It has not been in any way remarkable. The throat for some years has been irritable and

liable to colds accompanied with tenderness and a slight cough. Four months ago she contracted a most severe cold which settled about her throat, and has persistently remained, attended with hoarseness and pain in speaking.

Present Condition.—She is a woman of small stature, measuring in height not more than five feet one or two inches, and of slender frame, but well formed and proportioned. Her head is of medium size, rounded and shapely. The face is a refined one, ovalish in form, with a moderately high forehead, straight, delicately chiselled nose, small, pleasing mouth, with thin lips, and a retiring chin. The hair is black; the eyes dark brown. The complexion is a clear brunette, the cheeks showing considerable color. The skin of the face is remarkably soft and smooth, and singularly free of all glandular disorder.

The ears are well shaped and exhibit no peculiarities, either as to form, in the way of points, or in the growth of hair. The larynx is not larger than usual upon women of her build and age, and is not prominent. Owing to the inflammatory and painful laryngeal affection, the voice at present is feeble and hoarse. Dr. J. Solis Cohen and myself have made an examination of the larynx, and find the vocal cords to be intensely red and hyperæmic. The teeth are in a remarkably fine state of preservation, and are perfect as to form, number, and order.

Her natural constitution, or physique, is by no means strong. The chest is narrow and hollow. The mammæ are of equal size, small and flat, and look as though they might belong to a frail, delicate young woman who had but recently entered upon puberty. The nipples, and areolæ with their papillæ, are unusually small, are pinkish in color, and but slightly pigmented, and have a somewhat masculine appearance as to form, size, and color. She assures me that these structures have changed greatly of late, and that whereas they now exist as I have represented them they were formerly womanly, and that the mammary glands were of average size. As she remarks, "the chest seems to have contracted and the breasts to have shrunken." The arms and legs are feminine in shape, and are slender and spare. The hands and feet, fingers and toes, are small and womanly, and possess no more hair than is often met with in women. The nails are perfectly formed and present nothing unusual. The integument is everywhere, with the exception of the face, dry, thin, and wanting in adipose tissue. She informs me that a marked unaccountable change in her general physique has taken place during the last year, and that she has lost much flesh, as much, latterly, as ten or fifteen pounds. She is becoming sparer month by month, and this without any apparent cause, for her health is fair, her appetite good, and the various functions quite regular. Menstruation still continues to take place normally in all respects.

Her character is strictly womanly, all her tastes being remarkably feminine and domestic. She possesses a quiet, composed manner, and is reserved, taciturn, and modest in disposition. Her facial expression, without being melancholic, is habitually thoughtful.

Growth of Hair.—Upon the scalp the hair is short, when permitted to hang loose, reaching only to the shoulders, and is quite thin. It is black, has a brilliant lustre, is naturally oily, and is of fine texture. It is equally distributed over the scalp, and does not grow in the form of tufts, or in any way irregularly. Around the margin, it terminates on all sides normally. It neither encroaches in front upon the forehead, nor behind upon the neck, nor is it found upon the auricle or within the external auditory canal. It even ceases abruptly about the temporal region, and does not run into the side whisker. The hair of the scalp is distinct and of another kind from that of the whisker. The eyebrows and eyelashes are full, but by no means heavy.

The upper lip, cheeks, chin and sub-maxillary region are the seat of hair, in the form of full mustache and beard, which involves exactly the same regions as in the male. The hairs of the mustache are about a half inch long, of uniform length, pointed, and fine in texture. Those of the whisker and beard are four or five inches in length, curly, abundant and thickly set, and likewise of fine quality, although they would scarcely be termed soft and silky. Both are black in color, the central portion of the beard showing a dark reddish-brown shade. Viewed in its entirety the beard would be termed full, thick and handsome, and is such as is not unfrequently met with upon men who have never shaved. It grows evenly and uniformly thick on all sides, although fullest at the angles of the lower jaw. The hairs come out normally from the follicles, and tend to curl slightly. Upon the cheeks, over the malar bones, the hair, as is ordinarily the case in men, terminates in lanugo, but does not encroach beyond the region of the malar bones. The nose and forehead are singularly free of hair.

Extending from shoulder to shoulder, over the back, there exists sufficient hair to constitute a diffused hairy patch, about the width of a hand. It is composed of thin, soft, blackish hair, about an inch in length. The hairs are not very closely set, and are not so numerous but that the skin may be readily seen through. They are thickest over the region of the upper dorsal vertebræ. The growth ceases, with straggling hairs, on either side, upon the shoulders. What is quite curious, there does not exist any connection between this patch on the back and the hair of the scalp; for over the lower cervical vertebræ there is a space several inches in width which is entirely devoid of hair other than fine lanugo. The whole of the back, however, on either side, from the scalpulæ downwards, is covered sparsely with the same kind of hair as about the shoulders, but not so stout nor so thickly set. The hairs start from either side of the spinal column, and take a course downwards and forwards around the sides of the thorax, covering the lateral portions of the trunk. The vertebral region itself is almost entirely free of hair. The hairs lie close to the skin, and are uniformly distributed over the surface.

The axillæ possess no more hair than is ordinarily met with in

woman. Over the upper portion of the chest, below the clavicles, are noticed a few straggling, fine hairs, but they are not sufficiently numerous to attract attention. The mammæ are smooth and devoid of hair ; nor are there any short, stout hairs about the areolæ of the nipples, where they might be expected to exist. Upon the abdomen there is a small, finger-nail sized, pigmentary mole, but it is said not to be hairy. The umbilicus is free from hair. The pubes, I am assured, possess no more hair than is commonly there encountered in women ordinarily hirsute ; nor, from the condition of the axillæ, should we expect to find an undue amount of hair on the pubes. The thighs and legs are slightly hairy, the hairs being long and thin, but not as numerous nor as strong as usually met with upon men. The arms, however, from the shoulders to the wrists are somewhat more hairy, but not to the extent that they would be considered in any way remarkable. The hands and feet have the usual amount of lanugo, a shade stronger and darker than commonly seen in women. Upon the arms, thighs and legs there exists a form of lichen pilaris,—a condition characterized by dryness and roughness of the skin and an obstruction of the openings of the hair follicles, with little conical masses of dried epithelium. The color of the integument of the body and extremities is yellowish-brown or swarthy.

Family History.—The parents of our subject are both living and are well known in the community where they reside. They are respectable country people, and are hearty and in every way normally developed individuals. Their parents (the grandparents of our case) were likewise healthy and normally constituted people. Neither generation manifested any unusual growth of hair ; nor is any one in the family or among the relatives known to have shown any tendency to the development of hairy growths. Our patient has two brothers, one aged twenty, the other eleven, and one sister, nine years old, comprising the family of her parents, none of whom present any peculiarities. They exhibit no unusual growth of hair either upon the head or body. The eldest brother, until he arrived at the age of fifteen, is said to have had a remarkably smooth face. The sister likewise offers no unusual amount of hair.

Having described the most noteworthy features in connection with the history and present condition of the case, I desire to call attention briefly to several of the more prominent points which combine to make it one of more than usual interest.

Although the development of hair upon the trunk and extremities is in itself anomalous, and entitled to special remark, yet, viewed as a deformity, this must be regarded as of insignificance in comparison with that upon the face. Upon the general surface, with the exception of the back, it is simply an augmented growth of lanugo, such as is not very rarely seen upon middle-aged women, but upon the face it is altogether an abnormal and moreover an excessive production. At the same time it must be conceded, I think, that there exists a close connection between the hirsuties of the trunk and extremities and that of the face, a point to which I

shall presently revert. On the other hand, there does not appear to be any connecting link between the development of the hair in regions where it is normal in woman, as on the scalp, in axillæ and on pubes, and that of the face and trunk.

It is important to note, in the first place, that the hair of the face was a congenital condition, a certain amount of lanugo, it will be remembered, having been present at birth. Upon other regions of the body, excepting the scalp, there was no trace of hair; nor, according to the statement made, did any make its appearance until puberty, when it began to show itself upon the trunk and limbs and other regions usually hairy, namely, axillæ and pubes. The fact of the hirsuties of the face being congenital, explains, in a measure, several of the peculiarities of the case. Had, for example, the hair of the face been an acquired growth, appearing for the first time at puberty or later, and dependent upon sexual development, there would without doubt have been other decided masculine characters present. As has been observed, however, the hair follicles and hairs of the face were at birth already well-formed and in an advanced state of development, and began to grow at once and continued to grow for some years at an uniform pace, subject apparently to the same influences as those which regulated the growth of the hair of the scalp.

It has been noticed that the general health was much below the average throughout childhood, and that physical bodily development took place very tardily. I cannot think, however, that this was in any way dependent upon the abnormal growth of hair, but that it was rather an accidental circumstance, resulting from other and quite different causes. This observation seems to be fully substantiated by the fact that the period of puberty exerted no particular effect upon the growth of the hair of the face, and this point seems to me to be one of the most noteworthy in the case. As has been stated, the hair of the face increased quite uniformly until about the age of ten, when it grew rapidly for a short time. At fourteen puberty occurred, but without any appreciable increase of the hair upon the face, and at sixteen there was again a rapid growth, which continued for about a year, when it attained its greatest profusion. It is also to be noted that puberty did not occur before the usual age, an event which might have been looked for considerably earlier than the usual period; nor was it accompanied by any pain, difficulty, or general disturbance of the system. Contrary to what we should have expected, moreover, the flow became at once normal. All of these points go to show conclusively, I think, the complete independence of the hairy growth of the face of sexual development.

The perfectly natural increase of the hair of the scalp, axillæ and pubes is also an occurrence worthy of remark, for we should have naturally anticipated a more or less excessive growth certainly upon the head. These regions were manifestly not under the same influence as that which regulated the growth of hair elsewhere. They seem to have entirely escaped this force, for the hair upon these parts has

at no time offered any peculiarities. Contrary to what is commonly observed in similar cases, the hair did not manifest any disposition to encroach upon the forehead or upon the ears, nor to extend itself down the nape of the neck and over the vertebral column. All of these localities remained free.

Concerning the general hirsuties of the body, if we accept the statement of the patient as to its growth as being correct (a point, however, that I have from the first been inclined to doubt), we must concede that it was occasioned by the same normal influences which calls forth the hair on usually hairy parts, as, for example, in the axillæ and on the pubes. But, as I have before intimated, it seems to me much more likely that it manifested itself early in life rather than at puberty, perhaps so slightly as to have been overlooked, and that therefore it was, we may almost say, congenital; just as in the case of ichthyosis, where, as we know, the deformity very often does not show itself until some months after birth. The non-existence of circumscribed patches of hair or tufts, and of hairy moles, one or more of which we should rather anticipate meeting in such a case, may also be referred to as being unusual.

The most interesting feature, however, is the complete absence of all signs of masculinity, traces of which we should naturally look for and expect to find either in the physical structure or in the disposition. But, as I have stated quite fully in the notes, the contour of the body, the form of the pelvis, limbs, hands and feet, the features of the face, the larynx and the voice are all strictly feminine. Although, as described, the mammæ are small and flat, according to her own statement as well as that of her husband, this condition is of recent date and has taken place gradually within the last year or two. As we have recorded in the history, the breasts at puberty though not large were by no means small, and at the birth of her children contained sufficient milk to nourish them for a month or longer. Whether this marked diminution in their size is to be attributed to the failure of her general health, which has been accompanied by decided loss of weight, or whether an important physical change, attended by the establishment of certain masculine traits, is about taking place, cannot as yet be determined. At present, however, the atrophy of the breasts is the only sign of the kind to be noted.

I may also revert, in passing, to the unusual regularity of the teeth, for, as is well known, observers have from time to time stated, whether correctly or not, that it is common to observe in congenital hirsuties more or less irregularity and deficiency of these structures.

There is certainly no reason to suppose that any hermaphroditic element exists in the constitution of our case. Beyond the hirsuties of the face, I have been able to find no virile characters. The circumstance of menstruation having occurred with regularity and normally since the age of fourteen, and that she has conceived and borne two children at brief intervals, clearly determines that the female sexual characters are fully and perfectly developed.

The entire absence of any hereditary history is also a matter of interest, for, although the non-existence of such influence is not unfrequently observed in similar cases, it would certainly have been more in accord with the laws of heredity had there been some trace of hirsuties in parents or in grandparents. But what is still more remarkable is that two children should have been borne to the mother without having manifested, up to the age at least of four years, any similar peculiarity.

Upon the subject of there having been any "maternal impression" during pregnancy in our case, we learn no facts which can be regarded as being of any value. During the mother's pregnancy there lived close by a woman who had a small hairy mole upon the cheek, and who was the subject of remark on the part of the mother, but I am unable to learn that she placed any stress upon this circumstance, or that she even attributed the deformity of her daughter to her having daily seen this woman. The mother, indeed, offers no suggestion by which she can, even to her own mind, account for the production.

In regard to the question which was asked me by the patient, whether the growth of the face could be successfully and permanently removed (and I need not add that it is to her the source of intense mortification and distress), I would say that the only justifiable means at our command is palliative, consisting in either the daily use of the razor or in the employment of a depilatory powder. The recommendation of one or the other must depend upon the circumstances peculiar to the case. In the case before us, considering the extensive surface to be operated upon, I should favor the employment of the razor.

The portrait which accompanies these remarks has been drawn on stone from a photograph taken quite recently, and is an accurate representation of the beard as it now exists.

ON THE NOMENCLATURE AND CLASSIFICATION OF DISEASES OF THE SKIN.

BY L. DUNCAN BULKLEY, A.M., M.D.,

Physician to the Skin Department, Demilt Dispensary, New York; Attending Physician for Skin Diseases at the Out-Patient Department of the New York Hospital, etc.

WHILE it is granted that the discussion of the Nomenclature and Classification of Diseases of the Skin is of an importance far secondary to that in regard to their nature and cure, it must be yielded that a correct understanding of the principles of nomenclature and classification of any order of diseases is essential to a full understanding of the branch of medicine to which those

diseases naturally belong. It has seemed best, therefore, to present to the readers of the Archives a scheme which, we believe, if utilized by those engaged in dermatology, will assist much in a comprehension of the subject and thus secondarily will aid them in managing this class of affections.

The classification which follows is not presented as a new one, indeed it possesses very few elements of real novelty, but it is an effort to harmonize the classifications now in practical use by many, and to present the entire subject in a concise, clear, and practical manner.

It is not presented as a classification which we should wish to adopt as a final one, but it is offered as a report of progress, representing, as I conceive, the present state of opinion of the greatest number of those who are from clinical experience best able to judge of the requirements and proprieties of a Nomenclature and Classification of Diseases of the Skin: this scheme is open to criticism, I am well aware, and I am also open to conviction in regard to any of its elements, and expect to make such changes in it in the future as advancing studies in dermatology will show to be advisable.

The present classification is based, as will be seen, very largely upon that of Hebra, the main principles of which have stood the test of nearly a quarter of a century of hard work and active criticism, and which is to-day the accepted guide of many teachers in this and other countries. In preparing this nomenclature and classification, however, I have taken advantage of suggestions from Neumann, Duhring, and others, including French and English writers, and, while the elements of the German arrangement of Hebra predominate greatly, his arrangement will be found to be greatly modified and simplified, so as to form really a new one which may be properly called an American classification, for use in studying and teaching dermatology in this country.* Such an arrangement as the following I consider to warrant far better the title of a *Clinical Classification* than the ones, such as that of Wilson, for which this name has heretofore been claimed. The main general elements of novelty in the present scheme may now be briefly noticed; matters relating to nomenclature and arrangement of separate diseases will be referred to later.

The class of "Parasitic Affections" I have placed first, as being the first group which has reached the *ultima Thule* or final limit in classification, namely an etiological basis; this class has long been accepted even in classifications claiming a histological basis.

The second class, that of "Glandular Affections," is made to embrace all those diseases already recognized as such, but sepa-

* This classification has been prepared primarily for the use of classes in Dermatology at Demilt Dispensary, and is printed on a folded card of four pages, a little larger than a postal card, for convenience of pocket reference. The Editor will here state that the Digest Department of the "Archives" has been from the first divided up on a plan very similar to that indicated by this classification, and also that in future, as far as any editorial work in this Journal is concerned, this nomenclature and classification will be adhered to; contributors will, of course, exercise their discretion in regard to terms, etc., employed.

rated by writers under many different names and heads ; this class rests on a pathological and clinical, rather than on an etiological or histological basis, but we believe it to be sound in theory and useful in practice.

As the next best recognized and most clearly defined clinical class, with a beginning of histological support as far as relates to herpes zoster and trophic disturbances, we place the "Neuroses" of the skin, a class which is continually being more and more clearly defined, and which receives recognition in many classifications.

The remainder of the classes, as also most of the diseases under them, correspond to those of Hebra, with certain exceptions. Thus, his class of Anæmiæ, or anæmic affections, which I have never observed clinically, if it exists at all, does not find a place here ; also his two classes of benign new formations and malignant new formations are united in our ninth class; and his class of "Ulcera cutanea," which includes the primary venereal ulcers and varicose and other ulcers of the leg, is also omitted ; thus the present arrangement has but nine classes instead of twelve, as proposed by Hebra.

With this much of introduction the classification is presented, after which the principles of Nomenclature and their application in this scheme may be considered.

LESIONS OF THE SKIN.

A. Primary Lesions.	B. Secondary Lesions.
1. Macula; spot, macule.	1. Squama; scale.
2. Papula; papule.	2. Crusta; crust.
3. Vesicula; vesicle.	3. Fissura; fissure.
4. Bulla; bleb.	4. Excoriatio; excoriation.
5. Pustula; pustule.	5. Ulcus; ulcer.
6. Pomphus; wheal.	6. Cicatrix; scar.
7. Tubercula; tubercle.	
8. Phyma; tumor.	

CLASSIFICATION.

OF

DISEASES OF THE SKIN.

Class	I.	**Morbi cutis parasitici.**	Parasitic Affections.
"	II.	**Morbi glandularum cutis.**	Glandular Affections.
"	III.	**Neuroses.**	Neurotic Affections.
"	IV.	**Hyperæmiæ.**	Hyperæmic Affections.
"	V.	**Exudationes.**	Exudative Affections.
"	VI.	**Hæmorrhagiæ.**	Hæmorrhagic Affections.
"	VII.	**Hypertrophiæ.**	Hypertrophic Affections.
"	VIII.	**Atrophiæ.**	Atrophic Affections.
"	IX.	**Neoplasmata.**	New Formations.

Class I. Morbi cutis parasitici. Parasitic affections.

A. Vegetable.

1. Tinea trichophytina (*parasite—Trichophyton tonsurans*)
   - corporis (or circinata.)
   - capitis (or tonsurans.)
   - barbæ (or sycosis parasitica.)
   - cruris (or eczema marginatum.)
2. Tinea favosa (or favus) (*parasite—Achorion Schœnleinii.*)
3. Tinea versicolor (*parasite—Microsporon furfur.*)

B. Animal.

1. Phthiriasis
   - corporis
   - capitis
   - pubis

   (*parasite—Pediculus.*)
2. Scabies (*parasite—Acarus scabiei.*)

Class II. Morbi glandularum cutis. Glandular affections.

A. Diseases of the Sebaceous Glands.

I. Due to faulty secretion or excretion of Sebaceous matter.
1. Acne sebacea
   - oleosa
   - cerea
   - cornea

   (or seborrhœa.)
   - exsiccata (or xeroderma.)
2. Acne punctata
   - nigra (or comedo.)
   - albida (or milium.)
3. Acne molluscum.

II. Due to inflammation of sebaceous glands with surrounding tissue.
4. Acne simplex.
5. Acne indurata.
6. Acne rosacea.

B. Diseases of the Sweat Glands.

I. As to quantity of secretion
1. Hyperidrosis.
2. Anidrosis.

II. As to quality of secretion.
3. Bromidrosis.
4. Chromidrosis.

III. With retention of secretion.
5. Dysidrosis.
6. Sudamina.

Class III. Neuroses. Neurotic affections.

1. Herpes zoster (or zona.)
2. Pruritus.
3. Dermatalgia.
4. Hyperæsthesia cutis.
5. Anæsthesia cutis.
6. Trophic disturbances.

Class IV. Hyperæmiæ. Hyperæmic affections.

A. Active.

1. Erythema simplex
   - idiopathicum.
   - traumaticum.
2. Roseola.

B. Passive.

1. Livedo mechanica.
2. Livedo calorica.

Class V. Exudationes. Exudative affections.

A. Induced by Infection or Contagion.

1. Morbilli.
2. Scarlatina.
3. Variola.
4. Varicella.
5. Vaccinia.
6. Pustula maligna.
7. Equinia (or glanders.)
8. Diphtheritis cutis.
9. Erysipelas.

B. Of Internal or of Local Origin.

I. Erythematous.
- 1. Erythema
  - multiforme.
  - nodosum.
- 2. Urticaria.

II. Papular.
- 3. Lichen
  - simplex.
  - planus.
  - scrofulosus.
- 4. Prurigo.

III. Vesicular.
- 5. Herpes.
  - febrilis.
  - iris.
  - progenitalis.
  - gestationis.

IV. Bullous.
- 6. Hydroa.
- 7. Pemphigus
  - vulgaris.
  - foliaceus.

V. Pustular.
- 8. Sycosis.
- 9. Impetigo.
- 10. Impetigo contagiosa.
- 11. Ecthyma.

VI. Erythematous, papular, vesicular, pustular, etc.
- 12. Eczema.
- 13. Dermatitis
  - calorica.
  - venenata.
  - traumatica.

VII. Squamous.
- 14. Psoriasis.
- 15. Pityriasis rubra.

VIII. Phlegmonous.
- 16. Furunculus.
- 17. Anthrax.

Class VI. Hæmorrhagiæ. Hæmorrhagic affections.

1. Purpura.
   - simplex.
   - papulosa.
   - rheumatica (or peliosis rheumatica.)
   - hæmorrhagica.
2. Hæmatidrosis (or bloody sweat.)
3. Scorbutus.

Class VII. Hypertrophiæ. Hypertrophic affections.

A. Of Pigment.
1. Lentigo.
2. Chloasma.
3. Nævus pigmentosus.
4. Morbus Addisonii.

B. Of Epidermis and Papillæ.
1. Lichen pilaris.
2. Ichthyosis.
3. Cornu cutaneum
4. Clavus.
5. Callositas (or tylosis.)
6. Verruca.
   - vulgaris.
   - senilis.
   - acuminata.

C. Of Connective Tissue.
1. Scleroderma.
2. Scleremia neonatorum.
3. Morphœa.
4. Elephantiasis (Arabum.)
5. Dermatolysis.

D. Of Hair. 1. Hirsuties. 2. Nævus pilosus.

E. Of Nail. 1. Onychia. 2. Onychauxis.

Class VIII. Atrophiæ. Atrophic affections.

A. Of Pigment. { 1. Albinismus. 2. Leucoderma (or vitiligo.) 3. Canities.
B. Of Corium. 1. Atrophia cutis. 2. Atrophia senilis.
C. Of Hair. { 1. Alopecia. 2. Alopecia areata. 3. Atrophia pilorum (or fragilitas crinium.)
D. Of Nail. Onychatrophia.

Class IX. Neoplasmata. New formations.

I. Benign New Formations.

A. Of Connective Tissue. { 1. Keloid. 2. Molluscum fibrosum (or fibroma.) 3. Xanthoma (xanthelasma or vitiligoidea.)
B. Cellular. { 1. Lupus { vulgaris. erythematosus. 2. Scrofuloderma. 3. Rhinoscleroma. 4. Syphiloderma.
C. Of Blood Vessels. { 1. Nævus vasculosus. 2. Telangiectasis.
D. Of Lymphatics. { 1. Lymphangioma cutis. 2. Lymphadenoma cutis.
E. Of Nerves. Neuroma cutis.

II. Malignant New Formations.

1. Lepra. { tuberculosa / maculosa / anæsthetica } (or elephantiasis Græcorum.)
2. Carcinoma. { epitheliomatosum (or epithelioma.) papillomatosum (or papilloma.)
3 Sarcoma. { idiopathicum. pigmentosum.

In adopting a Nomenclature I have (with one exception to be mentioned later) followed a plan which has been more or less recognized by several writers, of selecting, as far as possible, words derived from the Greek for the primary name of the disease, while secondary terms and expletives are given always in Latin, a plan which has been heretofore followed in making the report of my dispensary work during the past three years. Where it was thought that the term given was not sufficiently clear, synonyms have been introduced.

Under parasitic diseases, the disease tinea trichophytina or ringworm in its various forms, has been designated by names signifying the various portions of the body affected; thus, tinea circinata, the old herpes circinatus, or ringworm of the body, here has the designation "*tinea corporis*," indicating its location; *tinea capitis* (*trichophytina*), replaces the old herpes tonsurans, or tinea tondens, etc.; *tinea barbæ* is the more proper designation for the parasitic sycosis, thus leaving the name sycosis for the ordinary non-para-

sitic peri-follicular disease; while eczema marginatum, the parasitic affection about the thighs and genitals, so long misnamed, here takes the proper name *tinea cruris* (*trichophytina*), tinea genito-cruralis would perhaps be more accurate, but the shorter term is preferred. The other names in this group do not differ from those ordinarily accepted.

The arrangement of the diseases of the sebaceous glands, and the names employed, correspond more to the French teachings, and are the same as those which I suggested four years ago, after a careful clinical study of acne and its accompaniments,* and continued observation and study has still further demonstrated to me the propriety of classing all of these affections together under the generic term acne.

Some objections might be made to placing herpes zoster among the "Neuroses," Class III.; it has never thus been located in the classifications of others, but its true nervous origin is now so incontestably demonstrated that if we wish to really base our classification on pathological facts this disease should form the centre around which we may group others whose clinical features are wholly neurotic, but whose nerve origin is at present less clearly demonstrated. In regard to the "trophic disturbances" placed in this class, as far as I am aware, these have never entered any previous classification of diseases of the skin, and it would be difficult to place them anywhere but in the present location, for they may present many if not all the phenomena exhibited in other cutaneous maladies, erythema, vesiculation, atrophy, etc. It would, perhaps, be better to give a Latin equivalent for the name, but the subject of "trophic disturbances," or the changes in tissues resulting from nerve injuries, is so recent that it does not appear best to burden it with any new elements. The other diseases in this class are those commonly placed there by those who have written on the subject.

In Class IV., "Hyperæmiæ," the names and their arrangement are those of Hebra and Neumann, and are familiar to all.

The fifth class, "Exudative Affections," includes a large share of the more commonly met with diseases of the skin, and is at the same time the most interesting and yet the least satisfactory class; its basis is pathological rather than histological, while its two main subdivisions are purely clinical. Most of the subdivisions and the diseases under them will be readily accepted, but some differences of opinion may arise in regard to individual elements. Many recent writers have excluded the lichen simplex of older authorities, classing this papular eruption as eczema; this I do not accede to and still retain lichen simplex, acute and chronic, as a papular disease distinct from papular eczema, and also quite distinct from the other varieties here given, lichen planus and scrofulosus, as also different from the lichen pilaris, found among the epidermal hypertrophies.

It will be seen that both prurigo and pruritus enter this classifi-

* The American Practitioner, December, 1872.

cation ; the difference between the diseases represented by these names has not been recognized by the profession at large in this country, and I would call attention to the fact that by prurigo is understood the disease to which Hebra, and others following him, have firmly attached this name, which is a papular disease, not associated with lice nor related to pruritus, which appears under the head of neurotic affections.

Herpes, in the present scheme is made to include several forms which have been recognized by writers under this name, except herpes zoster, which, as before mentioned, is reckoned among the neuroses ; also many cases of irregular bullous disease, formerly classed as herpes phlyctenodes or as pemphigus, are here assigned a separate place with the provisionary designation of hydroa. Eczema and dermatitis are here brought together, because their lesions ofttimes closely resemble each other, and because this very proximity of relation will suggest the necessity of recognizing the purely local affair dermatitis and separating it clinically from the constitutional disease eczema.

The rheumatic form of purpura (Class VI.) has been called by some peliosis rheumatica ; it is desirable that the name of a disease shall as far as possible indicate its true nature, and it is here given its proper title, purpura rheumatica, inasmuch as it is undoubtedly a form of purpura occurring in rheumatic subjects. Hæmatidrosis, or bloody sweat, and scorbutus have not generally been classed among the cutaneous hæmorrhages, the former, however, is plainly but an effusion of blood from the capillaries of the sweat glands, and the latter, scorbutus, should be recognized and described among hæmorrhages in the skin, because its cutaneous manifestations are frequent, and are very liable to be mistaken for purpura.

In Class VII., under connective-tissue hypertrophies, I have included both scleroderma and scleremia neonatorum as separate diseases, as they are generally recognized and described as such, although some confusion exists yet in reference to their true points of similarity and difference. Morphœa is classed by Duhring among the atrophies of the skin, he stating that "the more important changes which take place are manifestly of an atrophic nature ;" Fox places it among the hypertrophies. By morphœa I understand the same disease which Duhring has so well described, but I take issue with him in regard to the process of disease, which I regard to be an hypertrophy rather than an atrophy, the hardening resembles that of scleroderma in some of its features, but distinct, differences exist, and the final result in morphœa is less of an atrophic process than is that of scleroderma, as I have elsewhere shown,* and yet scleroderma is recognized by all as an hypertrophic disease ; morphœa appears to be rather a lardaceous infiltration of the connective tissue ; researches are needed in order to determine its exact place in classification, for the present it must remain here.

* Archives of Dermatology, Vol. III., No. 2, January, 1877, page 100.

The term leucoderma (Class VIII.) I have preferred to other terms applied to this affection, inasmuch as it corresponds to certain other names which have taken a firm hold on dermatological nomenclature, as syphiloderma, scrofuloderma, xeroderma ; vitiligo signifies but little etymologically, while albinismus partialis, quite as much as leucoderma, fails to recognize the darkened borders of the white patches.

In the ninth class, " New Formations," I have followed the Germans as closely as possible, combining, as mentioned before, the two classes of Hebra, benign and malignant new formations in one class. Epithelioma is made here to include rodent ulcer ; and pigment sarcoma represents many cases of so-called melanosis.

As before mentioned this nomenclature and classification is not all that we could desire, it is based on several modes of grouping diseases, etiological, clinical, pathological, and histological (the latter especially in the ninth class), but I shall not attempt here to defend it, because its different elements have received the sanction of those well versed in dermatology, and, were a complete revolution attempted, much confusion would necessarily result and the student and those little acquainted with the subject would be thereby perplexed instead of assisted. It is sincerely hoped that those writing and reporting cases in this country will endeavor to use a uniform system of nomenclature and classification, and, after much candid study of the matter, and a due consideration of dermatological literature, the present scheme is presented as most likely, in my opinion, to harmonize and reduce to a clear and practical basis the, to many, obscure and difficult matter of the Nomenclature and Classification of Diseases of the Skin.

A CASE OF ERYTHEMATOUS LUPUS OF THE PENIS.

BY HENRY G. PIFFARD, M. D.

THE following case is of interest in consequence of the rarity of the lesion in the location mentioned :—

A. B., aged 28 years, born in Germany, consulted me June 8, 1876, for a lesion of the penis, of which he gave the following history : Five years before, a small reddish spot appeared upon the glans near the meatus. To this he applied Tinct. of Iodine without benefit, as the spot increased in size, healing in the centre forming a ring. Three other spots, similar to the first, subsequently appeared and progressed in the same manner. Various treatment had been employed without benefit. Upon examination I found two

pretty distinct rings upon the glans, and two much larger ones, situated partly upon the glans and partly upon the surfaces back of the glans. (The patient had been circumcised in infancy.) The two larger rings were not quite complete, as at a few limited points the lesion was not apparent. The borders were slightly elevated, red and scaly, but the centre was very little changed except that the mucous membrane appeared to be a little paler than normal, and very slightly thinned. The eruption presented very much the aspect that we might expect an ordinary ringworm (*trichophytosis*) to exhibit if it were possible to have this affection upon these parts. Not being quite certain as to diagnosis, I directed the patient to apply the *Ungt. Hydrag. Amm.* twice daily, and to return at the end of a week.

June 17.—No improvement or apparent change. There was one point in particular which gave him annoyance, as it was apt to tear and bleed whenever he had intercourse. This point, rather more elevated than the rest, I removed with curved scissors, and directed him to continue treatment.

June 24.—The place from which the small piece was removed healed kindly, but there was no improvement in other respects. The possible parasitic nature of the affection being excluded by the negative result of treatment, I came to the conclusion that the lesion was erythematous lupus, and decided to excise the affected portions that were situated upon the penis (mostly on the dorsal aspect) behind the glans, and to apply the galvano-cautery to the borders of the rings upon the glans. Dr. Keyes saw the case with me, and concurred in the diagnosis and proposed treatment.

June 29.—The patient being etherized, Dr. Keyes and Stimson assisting, I dissected out the preputial portions of the larger ring with curved scissors, and closed the incision with four points of suture. The rings upon the glans were then touched with white hot platinum wire. One ring partly on the glans or partly behind it, was left untouched, in accordance with a previous request of the patient.

July 3.—The line of incision completely healed except at the points of suture. One of the sutures had torn out during an erection; the others were removed. The parts cauterized looking well.

July 5.—All healed. The cauterized portions looking so well that I decided to burn out the remaining ring instead of excising it. The patient being anæsthetized by Dr. Fox (with nitrous oxide), the hot wire was applied to the lesion.

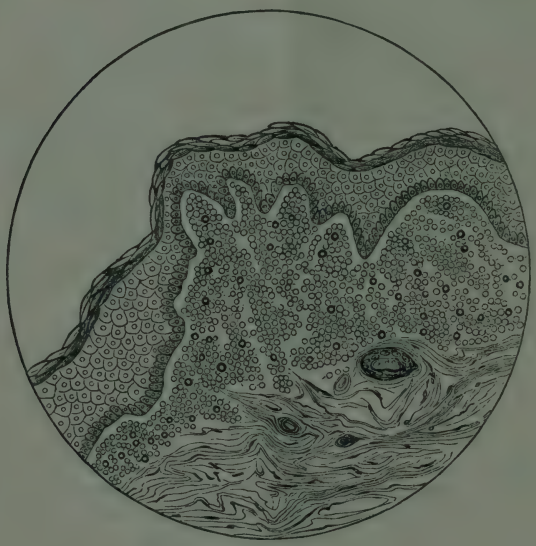
Aug. 29.—Since last date two or three points which escaped thorough destruction by the cautery when first applied, received subsequent attention. Everything healed kindly, and to-day there is no trace of the lesion, a few barely perceptible cicatrices being the only indications of previously existing disease.

The case above cited was without doubt an example of the orbicular or discoid form of erythematous lupus, an affection which by preference affects the face, but which may occur upon any other

part. This, however, was the first time that I have met with it on the penis. The cutting portion of the operation was of course a simple matter, but the cauterization required delicacy, the object being to thoroughly destroy the morbid tissue, but without burning deeper or wider than was absolutely necessary, lest the resulting cicatrices should mar the beauty and symmetry of the organ.

Histology.—Until quite recently microscopical observers had considered lupus erythematosus to be essentially an affection of the sebaceous glands. Thin, however (Med. Chir. Trans. LXVIII.), records the morbid changes in parts not provided with glands. Geber (Vierteljahr. f. Derm. u. Syph. III., p. 17) agrees with him in locating the early changes in and about the capillary vessels.*

The excised portions from this case were hardened in alcohol, sliced and stained with carmine, and upon examination I found the following appearances. The stratum corneum was composed of



from four to six layers of oval cells, many of them nucleated. Underneath, were several layers of deeply stained oval cells filled with granules. Next were the less deeply stained polygonal prickle-cells of the rete malpighii, whose deepest columnar cells contained a small quantity of pigment. The rete varied greatly in thickness in different parts, here and there sending down long, irregular and sometimes club-shaped prolongations, including between them en-

* THIN'S and GEBER'S papers have been abstracted in these Archives, Vol. II., p. 264, and Vol. III., p. 51.

larged papillæ. The papillæ themselves in the central parts of the lesion were densely infiltrated with small round cells completely obscuring all other tissue. At the margins the infiltration was more scanty. In some parts the cells encroached upon the rete so closely and thickly that its outline was with difficulty distinguished ; in others there was a distinct interval between the rete and the small cells. The infiltration occupied only the superficial portions of the corium, while the deeper were quite free. In these latter, the rich elastic network was well displayed. The superficial capillary vessels were invisible, the deeper ones greatly enlarged. No glandulæ Tysoni were found in the sections.

A CASE OF VEGETATING TUBERCULAR SYPHILODERM IN AN INFANT.

BY ARTHUR VAN HARLINGEN, M. D.,

Chief of the skin clinic, Hospital of the University of Pennsylvania.

THE case about to be described possesses a twofold interest ; in the first place as to variety of the lesion, secondly, from the stand-point of diagnosis.

John Welch, 8 months of age, was brought to the skin clinic of the University Hospital on the 6th of January last. On questioning the child's mother the following facts were obtained: She herself has always enjoyed good health, and has been twice married. By her first husband she had four children, all of whom are alive and well. About three years ago she married a second time, and she remembers observing at that time an eruption of reddish spots about her husband's neck which he explained as the result of chafing from a new collar. (It turned out later that he was under treatment at this time for active syphilis.) One year subsequent to this marriage she gave birth to an infant which died when three weeks old of " water on the brain." A year later the present infant was born, showing no signs of disease at birth nor during the first three months. At the end of that time an eruption appeared on the skin, consisting of little dry " pimples " which gradually spread and increased in number until the affection assumed its present appearance. This meagre history is all that can be obtained with respect to the child. The mother, on closer questioning regarding her own health, asserts that she has never suffered from venereal disease of any kind so far as she knows ; has never had any eruptions upon the skin, sore throat or eyes, falling of the hair, or pains in the bones. She has never undergone anti-syphilitic treatment.

Examination shows the infant emaciated and weazen though not to an extreme degree. The surface of the skin presents a

chalky appearance with some tinge of characteristic yellowishness ; the skin is also thin and wrinkled. The infant is evidently suffering from nasal catarrh, which, however, is not severe.

The skin affection is most extensively displayed about the face and scalp, although it is also seen over the arms and upon the buttocks. It presents several quite distinct types or rather phases of development. Where it has only recently made its appearance the eruption consists of discrete tubercular elevations of various dimensions, from large pin-head to pea-size ; roundish, rising sharply from the general level of the skin, of firm consistence, the surface smooth and dry, rather dusky-red in color, and, occasionally, surrounded by a faint areola. The lesions, at this stage, show no sign of suppuration or of fluid of any sort, they are perfectly solid and have rather an indolent look. In other localities, occupied by lesions which have run on to a later stage, a number of the tubercular elevations have coalesced, forming coin-sized patches, roundish or oval in outline, rising abruptly from the level of the skin, and sharply defined as in the case of the smaller lesions just described, —but differing from these in certain respects. Thus, at various points, here and there, the process has gone on to suppuration, the surface of these coin-sized patches of disease is no longer smooth but irregular, and in some cases indistinct pustules can be observed, grouped together in close proximity, but still separate. The appearance presented is as if several of the smaller tubercles had partially coalesced, and had then gone on to suppuration, still remaining distinct though closely joined. Occasionally, when the surface of a patch is unusually smooth, the various puriform collections can be seen under the epidermis, giving the patch the appearance of a multilocular purulent cyst. In a certain number of instances the process has gone one step further, and the surface of the patch is covered with a brownish, laminated crust.

The lesions which have been described are not very numerous, perhaps less than twenty distinct patches are to be seen over the entire surface, the newer and smaller ones being on the body and limbs. On the face there are one or two patches larger and more advanced than any of the others, and which must be described separately. The larger of these, and the one which is most striking, and possesses the most interest from a clinical point of view, is situated on the left cheek, extending from the angle of the mouth towards the ear. It is evidently made up of a number of smaller tuberculations the growth of which has been more luxuriant here than elsewhere. The patch is from three to four inches long by one inch in width, and is elevated quite a half inch above the level of the healthy skin. Its surface is irregularly mammillated, rough, warty, uneven. At present it is covered by a brownish-black crust of dried sero-purulent and sero-sanguinolent matter. The mother states that after the application of a poultice this crust comes away, leaving a shining red, moist, uneven surface. At present, however, the brownish crust is quite adherent in most places, and from underneath it there exudes a sanious liquid of horribly fœtid odor.

The eruption does not itch, and the child makes no attempt to rub or scratch it. The surface of the patch last described is sensitive and easily injured as may be gathered from the moist blood oozing through various fissures here and there.

Such are the notes of this interesting case as obtained when the child was brought to the University clinic. Mercurial inunctions were ordered, together with disinfecting lotions to the suppurating patches. Within a few weeks the child picked up amazingly, and the lesions were disappearing rapidly, when, as is so often the case with dispensary patients, she ceased attendance, and his subsequent history is unknown.

Regarding the points of interest in the case, I may be permitted the following remarks:

The vegetating tubercular syphiloderm, variously known as *syphilis cutanea vegetans*, *frambœsia syphilitica*, *mycosis syphiloides*, &c., though not a common syphilitic eruption, is, in the adult, not sufficiently rare to demand particular description. Kaposi * gives an admirable portrait of the affection as it occurs in its typical form upon the face, and describes the eruption briefly as consisting of reddish-brown elevations, resembling globose excrescences several lines in height, presenting a mammillated, warty aspect, fissured in various directions, the surface mulberry-like, nodulated, sometimes excoriated or covered with a film of skin, sometimes crusted over. Occasionally the elevations are situated upon a raised, infiltrated reddish base. This is the appearance as presented in the adult. It will be seen that it does not differ greatly from the same lesion in the infant. The rarity of the disease in the latter may be inferred from the fact that I have been unable to find any reference to similar cases in any of the well known works upon infantile syphilis accessible to me.

But, perhaps, the most interesting feature of the case is the close resemblance which the lesion in some of its forms bears to another infantile affection very commonly met with. I refer to the pustular variety of eczema. We often meet among infants of this age, and especially among such as are ill-nourished and poorly cared for, with instances in which a simple vesicular eczema breaking out in any portion of the body, as the cheeks or scalp becomes pustular by the irritation of scratching, heat, and dirt. The lesions coalesce, and we have the form of disease formerly known as impetigo capitis, the occurrence of which is too common to require a description of its appearance.

At first sight the case above described might very easily have been mistaken for one of infantile eczema. The early tubercular eruption was hidden by the clothing, and the vegetating, suppurating crusted lesions resembled most closely those of pustular eczema. The reddish areola about the patches looked very much like the effects of rubbing, and the occasional appearance of blood

* Die Syphilis der Haut und der angrenzender Schleimhäute. III. Lieferung, Tafel, lxi.

oozing out from the fissures added to the resemblance. But the likeness, to one accustomed to seeing cases of cutaneous disease, was only momentarily striking. The absence of veritable scratch marks, of those outlying papular and papulo-vesicular lesions which are usually observed about a patch of pustular eczema, the statement of the mother that when the crust was poulticed off the surface of disease underneath presented a granular warty appearance, the horrible fœtor of the discharge, and, finally, close examination, showing a base of new growth raising the patches high above the general surface, and also the presence of simple tubercular patches scattered over the rest of the body, decided beyond doubt the diagnosis of the affection, which the result of treatment justified.

TATTOOING OF NÆVI.

BY S. SHERWELL, M. D.,

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HAVING read with interest in the Archives of Dermatology for July, 1876, a description and recommendation of an operative procedure for the cure of Cutaneous Nævi by Balmanno Squire, M. B., of London, I am led to give an account of a measure which I have been using since 1873, for the relief of the same trouble; the operation is similar in kind, and seems to me to operate by causing the same effect, viz.: the blocking up of the divided or pierced capillaries, and as I am inclined to believe, with more certainty than in the plan suggested by that gentleman; it having also this additional advantage that under no circumstances is a scar large or small left.

I have a record of five cases, occurring in patients of ages varying from 1 to 33 years. In two of the cases the deformity was very slight, and any of the methods generally recommended would probably have sufficed for their obliteration, though as to efficiency and simplicity I prefer my own; of the other three cases one occupied a space of half a square inch, another was an inch and a half, by one inch in diameter, and was rapidly invading the region under the lower lid, and just encroaching on the lid itself, the subject being a child of about fifteen months; the last case was in an adult in whom about two-thirds of one side of the face was affected, the disease going a little over the median line towards the other cheek, from the nasal bones down to lower lip. In all except this last case the procedure was entirely successful, and in that one was decidedly so in part, but the patient, an irritably nervous woman,

*Read before the New York Dermatological Society, Feb. 13, 1877.

refusing further treatment after the second operation, I was compelled most unwillingly to desist and only a partial cure was effected.

It may be urged against the method about to be described that it is only the old acupuncture treatment, but in no work do I find, any account of coincident and succeeding treatment like my own, which, I believe, is at least equally necessary and important. I do not insist upon the instrument improvised, a better might easily be made, but it has answered in my hands.

I take a number (say eight) of common number six or number five sewing needles, first sharpening and somewhat roughening their cutting edges with a fine flat file at and for a short distance from their points, and then by means of heavy sewing-machine silk, well waxed, wrapped around the upper two-thirds of each in turn, and all together, form a fasces-like bundle, the points being somewhat less than $\frac{1}{16}$ inch apart; thus prepared I take either a saturated or fifty per-cent solution of carbolic acid, or a twenty-five to forty per cent salution of chromic acid, in a shallow vessel, and, dipping the points of the needles therein, make a series of punctures into the skin of the affected region. I have no special seat of election either as to centric or peripheric beginning, but should make it a rule to commence at any peninsular prolongation so often found, first commencing at the isthmus, then puncturing in and about the body of the same, by this means also finding out by a minor operation, the amount of sensitiveness of the patient, and the action of the styptic employed, on that particular individual. After the usually very slight bleeding ceases, which it does all the quicker for pressure, and also the sanious oozing which sometimes takes a little longer (pressure being kept up the whole time), I wipe the place off with a little alcohol, and apply quickly a thick layer or rather two or three layers of collodion over the whole surface treated, and over a moderate margin beyond, as being the best means, by its contraction, for keeping up permanent compression. I am convinced that it does this the better on account of the natural tendency of the treated parts to become swollen, so that we have as it were a strangulation of the pierced and irritated vessels occasioned by the pressure from within as well as from without, which leads to their more certain obliteration from the adhesive inflammation sure to follow. This coating of collodion under favorable circumstances will remain serviceable nearly a week; should the weather be warm it is much sooner dislodged and rendered inefficient from the perspiratory secretion beneath; renewal in such case, however, is in order, even over the old and patchy covering: at the end of ten days, the original operation may be repeated on a fresh portion of the nævus.

In none of the cases mentioned have I used any local or other anæsthetic, nor was the pain sufficient to warrant it, except in the last case, but the ether spray, as directed by Squire, would seem to be the most satisfactory way of causing anæsthesia, and would doubtless be, in itself, an active adjunct to the operation, by contracting vessels, stopping hemorrhage and lessening the surface and

bulk of the parts, for the subsequent better action of the collodion.

There is no after treatment save rest, and if the cheek has been operated on, the avoidance of foods difficult of mastication, &c.; in short, such measures as common sense would dictate; there is no feeling of pain after the first few hours, rigidity and immobility of part are the only discomforts.

I was first led to the use of this form of tattooing in nævi by a consideration of the possible cosmetic benefit to be derived from tattooing in cases of macular deformities of the skin; also from having observed the success obtained by my friend and colleague Dr. A. Matthewson, of the Brooklyn Eye and Ear Hospital, in tattooing leucomatous patches of the cornea, resulting either from scar tissue after old ulcerative keratitis, or from the interstitial deposit of the carbonate of lead from the lead washes, so often and ignorantly used in that disease both by the laity and profession. I do not see why either one of the more insoluble salts of lead or other metal, or mixtures of them, might not in this way be successfully introduced under the skin, thus, if not removing, at least lessening the deformity, to a mere blemish. Most persons affected in this way, I think, would prefer the spot or spots to be of any other color than the original. I have not as yet been able to try this, in default of cases, there seems to be in the laity an entire resignation to, and apathy, on the subject of mother's marks, which I must believe is shared in by physicians, the first believing it to be a mysterious dispensation of Providence, from which it is almost criminal to ask relief; the second also abetting that delusion from hopelessness of a cure. I hope other Dermatologists may be induced to give these recommendations a fair trial, and that they may be more fortunate in obtaining cases.

Since writing the above I have successfully treated another case, in which the dilated venoles and arterioles caused by acne rosacea resembled considerably a case of nævus; and now, instead of using the common sewing needle prepared as above, I take ordinary straight suture needles, in which have been made shallow grooves on the three sides, somewhat resembling those of exploring needles.

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Clinical Reports.

I. *Two cases of Hydroa.* By L. Duncan Bulkley, M.D., New York.*

On October 18th, 1875, I was asked by Dr. C. M. Allin to see with him and Dr. Dubois, a patient who presented a very anomalous eruption, which was then composed largely of bullæ. She was a large, stout lady, aged 49, who had borne 13 children, and had generally enjoyed good health, except that she had urticaria 30 years ago, after the still birth of her first child. She never had any other eruptions until the ones to be described, but has been subject to asthma. Her father died at 80 years and mother at 75 years of age; her mother was subject to sick headaches and her two sisters have nervous headaches.

Three months previously, while in Europe, this lady began to have what was diagnosed as Eczema by several European Dermatologists, and was there treated, but with little success; there were then moist, exuding portions of surface and intense itching on the inside of the thighs, under the arms and on the hands, and finally, in August, while in Frankfort, the whole body became covered with a moist eczematous eruption. While having the eczema, about two months before I saw her, she had a bulla on the outside of the left foot, which did not heal for some time; she had no other bullous disease until she had been several days on board ship, full six weeks afterwards, when a bulla again appeared on almost the same spot, which enlarged to the size of an egg, and was attended with great itching.

When I first saw her she had just returned from Europe, having left the ship but five days previous. I found her in bed and suffering intensely from the almost unbearable itching which affected much of the body, and at the same time suffering very considerably from the soreness produced by the number of already ruptured bullæ and those yet developing on different parts of the body: her sleep was almost entirely prevented by the disease, her tongue was slightly coated, bowels regular, there was moderate febrile action,

* Read before the New York Dermatological Society, December 13, 1876, in discussion of Dr. Fox's paper on Hydroa. See page 226.

urine, had a specific gravity night and morning both 1.027, reaction of both acid, with abundant of deposit of urates in the morning specimen, and a cloud of phosphates thrown down by heat in the evening specimen, urates and oxalate of lime abundant in the urine passed in the morning, no albumen or casts in either specimen.

There was very little on the skin that could be called eczema at that time, although there were some papules especially on the arms, hands and thighs, and some marks of scratching: but there were numerous bullæ, some of them ruptured and some still intact, of various sizes, situated on the back, arms, and thighs. As the disease progressed for a few days, new portions were invaded, bullæ formed on the hands, lower limbs and feet, also on the neck and face. Most of the bullæ were of moderate size, about ⅓ to ½ inch in diameter, but some were of one, two and possibly three inches in longest diameter. They came quite suddenly and were attended with but little inflammatory action of the base, they ruptured quite readily and their bases were not slow to heal. Almost the entire surface of the body was attacked sooner or later, the lesions soon disappeared from any one spot and left the skin normal though reddened for a time, but with no reproduction of the blisters upon the same surface.

She was given at once five drops of Fowler's solution and $\frac{1}{64}$ grain of strychnia thrice daily, after eating, quinine being added after a few days, and Kissingen water to a moderate extent between meals; locally, a wash was applied, containing sub-nitrate of bismuth, oxide of zinc and liquor picis alkalinus, and the zinc ointment, which she had been using to abraded surfaces, was continued. Some measure of relief was afforded at once by the treatment, and after two or three days she passed more comfortable nights, no hypnotic being given, but a good bowl of beef tea was drank at about ten or eleven o'clock at night. The progress of the disease seemed checked about the third or fourth day, although bullæ continued to develop for nearly two weeks. The eczema element had disappeared, and when the skin recovered from the blistering process it showed no thickening and no moisture.

About the first of January, 1876, she began to have quite violent urticaria, and again came under my care after it had lasted three or four weeks; at this time she had no return of the eczema nor of the bullous disease, the wheals of urticaria passing through a perfectly normal course, and the disease yielding tolerably to treatment.

Six months after this, in July, she again had the eczema on the hands, but now with no urticaria and no tendency to the formation of bullæ; this eczema yielded soon to treatment, and I have not seen her since.

Case II. The second case which I wish to present, exhibits quite a different form of bullous disease, recurrent in character and of much less extent, which might more properly be called pemphigus, but for the fact that so many of the prospective bullæ failed to go on to full development, they ending only in erythema.

Mrs. M. S., aged 26, was brought to my office by Geo. W. Holmes, of this city, on November 27th, 1876, when the following history was obtained: In April she experienced what she thought was a similar attack to the present, but on close questioning it was discovered that no bullæ formed at all, but that there were simply erythematous patches, which burned and smarted, and the attack passed away in a few days. Six weeks before her visit to me a second eruption appeared, which was seen by Dr. Holmes, and corresponded to the present one, there being blisters on various parts of the body, but it was not so severe as the one in regard to which I was consulted. Both of these attacks passed off without treatment.

Five days previous to my seeing her, she began to suffer from an irritation of the skin; very soon some redness was seen in patches, she would then generally rub them, and soon bullæ appeared. But bullæ came also where she did not rub the surface, indeed where she was almost unconscious of their presence: the blisters began to come about two days after the beginning of the cutaneous irritation, and were continuing to develop at the time of her visit, some having appeared during the preceding night.

When seen the eruption was located on both arms and forearms, left shoulder and back, left leg and face. There were some blebs upon the forearms, principally about the elbows, and some on the upper arms; on the left calf there was one which had ruptured, which covered an area nearly two inches in diameter, it was apparently unilocular, as were all the bullæ. The smallest ones were apparently those which had been on the face, where they had ruptured and dried down into brownish scabs, one on the side of the nose at the internal corner of the right eye, one on the left cheek near the nose, also several other crusts whose exact location were not noted at the time. There were also several erythematous spots about the face, likewise on the arms and elsewhere which had appeared exactly like those on which the bullæ had developed, but in which the congestive action had not gone thus far.

The bases of the bullæ were but little inflamed and their epidermal coverings were very thin and delicate; all of those unruptured contained clear serum. She was given Fowler's solution alone in water, from three to five drops thrice daily with the meals, and I have since learned from Dr. Holmes that the disease process had ceased entirely and most of the traces of the eruption had disappeared within a week or ten days after her visit. She was advised to continue the arsenic for a long time, as preventive of a recurrence.

The only etiological element discovered was that she had been subject to neuralgia, and that of late she had been under intense nervous strain and mental worry. Her husband was a syphilitic who had for some time been prostrated with syphilitic paralysis, and as the real cause of his sickness was known to her she was under the greatest mental distress, which very much disturbed her sleep as well; she also believed that her disease was syphilitic, and

it was with reference to this especially that the consultation was sought. There was certainly no syphilitic element in her case, however, which was very carefully gone over.

If we conclude these two cases under pemphigus, that disease must be made to cover many different and apparently distinct affections, for here, in the first case, we have a bullous disease extending over a period of about three weeks and involving in succession almost every portion of the body, preceded by eczema and followed by urticaria, an acute affair, with no relapse at the expiration of more than a year; and, in the second case, an acute bullous eruption of apparently self-limited course, lasting but a few days and involving but a portion of the body, and with phenomena not commonly observed in these affections, namely, a very considerable amount of irritation preceding the production of the bullæ, which caused the patient to scratch, and an incompleteness of the process, which resulted in many places in simply erythematous patches with some subsequent staining. The nervous elements in both cases were well marked, and one cannot avoid the conclusion, even from such isolated clinical observations, that these eruptions are in close relations with, if not entirely dependent upon, the agency of the nervous system. From our present received ideas with regard to herpes and pemphigus, I should be inclined to place these cases under the provisionary name of Hydroa.

II. *Case in which gonorrhœal epididymitis preceded the discharge from the urethra.* By J. T. Stansbury, Towsonton, Md.

On November 16th, 1876, I was called to see a gentleman whom I found suffering with a severe epididymitis of the right testicle. The disease had commenced two days previously, and at the time of my visit was fully developed. He had received no external injury and denied ever having had gonorrhœa, or any other venereal disease, but admitted that on the night of November 10th, he had indulged in sexual intercourse for the first time, but experienced no bad effects until attacked with his present illness on the 14th. He had had no inconvenience in passing water, and there had been no discharge from the penis before the testicle became inflamed, and I could discover none at the time of my visit.

The treatment consisted of rest in bed, a suspensory bandage, and opium and tincture of aconite internally. He rapidly improved and had every prospect of a speedy recovery until the evening of 21st, when I found him with a profuse gonorrhœa, which had made its appearance that morning—just seven days after his epididymitis.

From this date till his recovery, his case presented nothing remarkable.

I regard the case as one of true gonorrhœal epididymitis, *preceding* the urethral discharge. In advancing this opinion I am aware that the objection may be raised that the urethral discharge

may have existed prior to the inflammation of the testicle, or that the whole trouble may have been catarrhal. But this I think may be easily disposed of for the following reasons, viz.: the absence of discharge at the time of my first visit and for five days after; the patient's statement—which, under the circumstances, I think entitled to some consideration—that this was his first indulgence, and lastly, two other gonorrhœal patients whom I had recently treated, attributed their disease to the same woman with whom this gentleman had spent the night of the 10th of November. Only three similar cases, as far as I know, have been reported—one by Castelnau, another by Vidal, and the third by Sturgis, of New York. I therefore deem the case of some interest if only for its rarity.

III. *Case of suspected Gummous disease of the Penis.** By E. B. Bronson, M.D., New York.

The patient was 32 years of age, of fair average health, but presented an appearance that was somewhat cachectic. A history of syphilis was not clearly made out, but the patient bore a pigmented superficial scar upon the sheath of the penis, the remains of a venereal sore contracted about 14 years ago. Some time in July, 1876, he had noticed a yellowish discharge from the urethra coming on a few weeks after the last connection, which had been with a woman of the town. The discharge increased without marked inflammatory symptoms, but was accompanied with an unusual induration of the penis. At the expiration of some four months from the commencement of the urethral discharge the entire course of the urethra, from near the peno-scrotal junction to the glans, was marked by a dense massive induration, which at its posterior part was continuous with a more distinct tumor. At the right side it projected as a hard mass as large as a filbert, and merged in the more general induration at the under side of the penis; while upon the left side the same or another tumor was less prominent. When firm pressure was made upon the tumor a discharge which was thin, frothy, of a dirty yellow color, often sanious or tinged with blood, flowed copiously from the meatus. Unless such pressure was made the discharge was not very free.

Microscopic examinations of the discharge showed, besides abundant pus and blood corpuscles, large oval or round pavement epithelial cells and multitudes of round granules which strongly refracted the light; but little coarse detritus. Auto-inoculation of the discharge gave a negative result. For a month or more the case was treated by local remedies in conjunction with general tonics, with no perceptible effect upon the induration and with little or no effect upon the character of the discharge. A vigorous anti-syphilitic treatment was then inaugurated with the

* Patient presented before the New York Dermatological Society, November 14, 1876. See page 223.

iodide of potassium and mercurial inunctions. In a week a decided alteration had taken place, and at the date of the presentation of the case before the Society (two weeks after the commencement of the anti-syphilitic treatment), although considerable induration still remained, the tumor upon the right side had been reduced to a mere trace of its former size, while that upon the left had apparently become a little more prominent. The discharge had become less, was thicker and more whitish, though still retaining a reddish tinge.

(The serial articles on "The local treatment of certain Diseases of the Skin," and also the "Clinical Conversations," by the Editor, have been crowded out of this issue, but will appear regularly hereafter.—ED.)

NEW YORK DERMATOLOGICAL SOCIETY.

REPORTED BY DR. G. H. FOX, SECRETARY.

Seventy-eighth Regular Meeting, November 14th, 1876.

THE following cases were presented to the society :—

Case I. Lichen planus, by Dr. Bronson.
" II. Gumma of penis, by Dr. Bronson.
" III. Xanthelasma, by Dr. Sherwell.
" IV. Pemphigus foliaceus, by Dr. Sherwell.
" V. Impetigo contagiosa, by Dr. Fox.

The paper of the Evening on " Hydroa " was read by Dr. G. H. Fox.

On motion, the discussion of the paper was postponed till the next regular meeting of the Society.

In the discussion of DR. BRONSON'S case of *gummous disease of the penis* (see Clinical reports, page 221),

DR. STURGIS asked if the disease was circumscribed at the outset. He had seen the case, and thought there was a diffuse infiltration, and that the urethral discharge was sanious and mixed with air. He said that cases had been reported of diffuse inflammation of the corpora cavernosa due to syphilis.

DR. TAYLOR said that as a rule syphilitic inflammation of the corpora cavernosa was limited to two or three nodules, and according to Zeissl occurs usually at the distal portion of the penis. He had seen three instances of this growth. He mentioned a case where the morbid growth existed between the two corpora cavernosa, causing distortion of the penis. The connective tissue proliferation subsided without any treatment whatever.

DR. KEYES spoke of cases resembling gummatous disease in which the sound could demonstrate a limitation to the corpora cavernosa, and alluded to the tendency in these cases to resolution.

DR. BRONSON said that in his case a nodule could be felt at first which gradually merged into the corpus spongiosum. During four months there existed no tendency to resolution, but when antisyphilitic treatment began it melted away.

Dr. Sherwell's case of *xanthelasma planum* of eyelids was in a female patient, æt. 32, widow. He said this was the third case that had come under his direct observation. In a gentleman aged 50, the patches were excised about 18 months ago, and are now reappearing in their former site. He thought that the usual hepatic changes were present in these two cases.

Dr. Piffard remarked that the latest mode of treatment was by use of the skin scraper.

Dr. Fox inquired respecting hereditary tendency in this case.

In the discussion of Dr. Sherwell's case of *pemphigus foliaceus* (see Archives, Jan., 1877, page 97),

Dr. Bulkley remarked that it was perhaps the first case seen in America by any member of the society. It resembled a case seen by him in Vienna. His experience supported the arsenic treatment of Hutchinson in ordinary pemphigus. In one case the exhibition of arsenic produced a sudden and marked improvement, and a relapse followed the cessation of the remedy.

Dr. Bronson inquired respecting the value of a gutta percha bandage which was applied to one limb.

Dr. Sherwell said it kept the denuded skin clean, and did not increase congestion of the part.

Dr. Fox remarked upon the close resemblance in appearance which pityriasis rubra bore to pemphigus foliaceus.

Dr. Bronson concurred, and said that across the room one would be unable to distinguish them.

Dr. Piffard referred to a case in Charity Hospital, under the care of Dr. Keyes, which, contrary to the rule in such cases, got well.

Dr. Keyes said he did not regard the case referred to as one of pemphigus, on account of its recovery.

Dr. Sherwell said the health of his little patient was improving.

Dr. Fox, in presenting his case of *impetigo contagiosa*, said that five children in the same family presented flat pustules or circular crusts on face or hands. They had all been attacked within two weeks, and in several of the children the development of the pustules had been accompanied by feverishness and even vomiting.

The little patient exhibited had small circular crusts on her forehead, which, though darker than the usual "straw colored" crust, were yet characteristic, inasmuch as they could be easily removed, leaving nothing but a dry reddened surface beneath.

Dr. Bulkley said that the affection was undoubtedly impetigo, and possibly contagious, but that ordinary impetigo was often seen running through families. His clinical experience, however, had convinced him that we could not in this country accept in full the descriptions of contagious impetigo published elsewhere. The cases here showed darker and more adherent crusts than was expected: he had seen the disease in England under Dr. Tilbury Fox.

Dr. Robinson said that in cases which he had seen in London the crusts were generally thinner.

Dr. Taylor diagnosed the case as one of contagious impetigo. He said dark crusts might exist alone coincidently with light straw colored ones, becoming discolored by blood and dirt. The occurrence of the pustules on the posterior aspect of the phalanges near the nail and simulating a burn, he looked upon as an important diagnostic feature. In a number of cases which he had seen in the country during the summer months he had repeatedly observed this.

Dr. Piffard thought the case was certainly one of contagious impetigo, but added that our conception of this affection should be enlarged. He said the disease was first described by Naylor as porrigo, and read extracts from this writer's description.

Dr. Fox said that the affection existing in this family, as well as in two other families of which he had notes, corresponded in all essential points with the affection as described by Tilbury Fox and R. W. Taylor.

Dr. Satterlee exhibited an instrument for treating port wine mark according to the method of Balmanno Squire. It consisted in a number of parallel knives placed 1-16 of an inch apart, held firmly in a metal back, with a convenient handle attached.

Dr. Piffard exhibited a specimen of liquid tar soap, composed of oil of Cade, one part, and Sarg's liquid glycerine soap, two parts. Also a specimen of sulphur paste, made by rubbing precipitated sulphur with the above mentioned soap to a proper consistence.

Dr. Piffard presented to the Library, *Epitome of Skin Diseases*, by T. & T. C. Fox, London, 1876.

Seventy-ninth Regular Meeting, December 13th, 1876.

Dr. Bulkley exhibited a young girl with hereditary syphilis who presented a number of the symptoms in a very marked manner, the following history being first read :—

Minnie Diffle, aged 11 years, a delicate looking and sensitive child, crying easily, came under observation and treatment, November 28, 1876. Little could be learned of her family history; she had lost one sister in infancy, she has one brother, reported to be healthy, the father had died during her infancy, and the mother was reported to be well. The step-father, who came with her, was married to her mother when the patient was five years old, and their first and only child was dead born.

The only history in regard to the patient is that about three years ago the eyes became sore, and there are still the remains of the interstitial keratitis, plainly visible in the left eye; the step-father says the child has had no eruption on the skin during the past six years.

On examination, the forehead is found to be peculiarly shaped, the frontal eminences are very prominent and the intervening space

between flat or almost sunken ; at the corners of the mouth are well marked linear cicatrices, and the teeth exhibit the peculiarities recognized as belonging to hereditary syphilis : they are stunted and greatly thickened, irregularly set, and the central incisors are notched, the canine teeth are also mal-formed and pegged. Both tibiæ are found to be the seat of large nodes, just below the knees; they are swollen, very tender to the touch, and the patient says that they have ached so much at night that she has been kept awake by them till she cried herself to sleep. She was given a mixed treatment, and at the time of presentation to the Society, the pain in the legs, for the relief of which she had come, had ceased, and the swellings which were still present bore moderate handling and pressure without difficulty. The patient was exhibited as a well marked case of hereditary syphilis, with an unusual coincidence of a number of almost pathognomonic symptoms.

Dr. Fox gave a brief oral resumé of his paper on "*Hydroa*," based on a case already reported (Archives, October 1876, p. 25), and the evening was devoted to a discussion of the same.

Dr. Taylor spoke of cases which he had seen some years ago at the New York Dispensary. They occurred mostly among immigrants. The cases were characterized by erythematous rings upon the body and flat bullæ upon the forearms. The bullæ were not tense and were surrounded by a zone of erythema. He said they were similar to the cases described by Foster under the name of herpes contagiosus varioliformis (Archives of Dermatology, January, 1875.)

Dr. Bronson mentioned a case of bullous eruption in a patient which occurred every year upon the backs of the hands, followed by very superficial ulceration.

Dr. Draper spoke of a case in which numerous pea-sized bullæ occurred upon the face and forearms, many of them being varioliform, so that the diagnosis of small-pox was suggested. He thought that Bazin had confounded erythema with accidental vesicles, and with true pemphigus, or the hydroa resulting from iodide of potassium. He had seen purpura with vesicles occurring in patients of a gouty habit. He spoke of the liability of confounding a stage of disease with some distinct affection to which it might bear a resemblance, *e. g.*, erythema with vesiculation might be mistaken for hydroa in which the vesicles were the primary lesion.

Dr. Bulkley read the histories of two unusual cases of bullous eruption which might very properly be classed as hydroa (see Clinical Reports, page 217).

Dr. Robinson, in recalling cases of anomalous bullous eruptions which he had observed, related that of a boy, 8 years old, who had had vesicles and bullæ upon the forearms and legs since shortly after birth. In circumscribed spots there was a collection of whitish bodies resembling milia, a peculiar condition mentioned by Baerensprung and Hebra, as having been once seen by them in a case of chronic pemphigus. He had seen acute pemphigus in infants, non-contagious and non-syphilitic, occurring on the palms and soles during the first week after birth. He did not consider this form as

either rare or characteristic of syphilis. The syphilitic form is more purulent.

Dr. Draper, in speaking of the occurrence of bullous eruptions in healthy infants, related the following :—A case seen five years ago was healthy at birth and remains so at the present time. The infant was covered by a greater amount of vernix caseosa than he had ever seen at birth. A few days after the mother called his attention to the appearance of the child, which was then as red as a boiled lobster, the skin not being perfectly freed from the vernix. In a few days a bullous eruption occurred, became confluent, and the entire epidermis was shed, leaving a denuded surface, and in many places superficial ulceration. The child suffered little or no constitutional disturbance. He thought imperfect cleansing of the vernix might give rise to the formation of bullæ in certain children.

Dr. Otis related the case of a gentleman who presented a general vesicular eruption, some of the vesicles being as large as a pea. It passed off in a few days, leaving brownish crusts. Similar attacks recurred, one of which the patient attributed to the use of a hair wash, as it began on the scalp. Later, another attack occurred after taking quinine, which drug had also been a constituent of the hair wash. Subsequently quinine was administered and reproduced the affection. In one instance two or three grains only provoked a severe eruption resembling that from poison ivy.

Dr. Taylor related two interesting cases of bullous eruption due to iodide of potassium. A woman after taking less than one drachm, became sick and presented a swollen tongue, with bullæ on the face containing blood, and others upon the forehead, arms, tongue and roof of mouth, with sero-purulent contents. Bullæ upon gluteal region were followed by ugly ulcers. The second case was that of a woman who awoke at night with chills and itching of the skin. Large bullæ appeared on the arms, neck, and legs. When seen they were unbroken and looked as though resulting from a burn. She had eaten nothing unusual and was well in a day or two.

Dr. Draper had seen nearly the same eruption from bromide of potassium in the case of an epileptic.

Dr. Piffard spoke of numerous varieties of bullous eruption, many of which are common and others of which are extremely rare. He referred to their variable causation and the impropriety of classing them all under the head of pemphigus. He cited a unique case of so-called pemphigus which had been seen by several members of the Society. He thought it probable that it was a case of tuberculosis of the skin with cheesy abscesses.

Dr. Keyes (who had seen the case) said that the lesion was a pustular one, and the so-called "bullæ" were superficial abscesses. He said the pus formed not in the true skin, but above the papillary layer, and the appearance presented was suggestive of phlegmonous scrofulide.

Dr. Taylor thought that in this case there was no true cicatrix

left, and that the formation of pus was between the rete and the horny layer. Pus cells and granular matter was all that the microscope revealed.

Dr. Bulkley exhibited an instrument for lancing acne pustules: it consisted of a small knife propelled from the end of a tube by means of a spring, somewhat resembling the scarifiers used in uterine surgery.

Dr. Bronson exhibited a spoon scraper with an unusual length of scraping surface, designed for use especially in psoriasis.

Dr. Piffard exhibited some gelatine-coated pills prepared for him by McKesson & Robbins, containing 1-5th grain protiodide of mercury, and others containing 1-25th grain of the biniodide, and others 1-10th grain of iodide of sulphur. He suggested the use of the latter in rosacea and psoriasis. He said the gelatine lessened the irritating effect upon the tongue and throat, but they were less effective than 1-20th grain of the powder triturated with sugar.

Dr. Keyes remarked that iodide of sulphur was moderately soluble in glycerin (gr. i.—℥ i.)

Extracts and Translations.

THE PRESENT STATE OF THE DOCTRINE OF VEGETABLE PARASITES OF THE SKIN.*

BY PROF. MORIZ KAPOSI, OF VIENNA. TRANSLATED BY GEO. H. ROHE, M. D., BALTIMORE, MD.

UNTIL within the last ten years it seemed a task of no great difficulty, to clearly define the scientific character of the parasites infesting the human skin and to circumscribe the place occupied by them in nature. Up to that time the notions concerning them were rather simple, being mostly limited to their actual morphology, or to the physical features which they presented to the observer upon their habitat, the epidermis of man.

In the last ten years all this has been greatly changed. The relative material until then comparatively trifling in amount and easily brought under control, has during this time increased rapidly, until at present it has acquired an extent practically illimitable. In the search for the causes of different diseases, modern investigation has brought to light, one after another, new organisms, represented as factors in the causation of diseases, and, as such, demanding a definition of their biological relations, and their position in the natural world.

Medical pathology, which was affected both directly and ultimately by these discoveries, was, however, not competent to manage properly these results of research, and the materials collected were therefore turned over to the proper science—botany—for further investigation and classification.

Chemistry, also, was called upon to furnish a solution to the problem of the physiological character of these structures, and the manner of their morbific action.

Neither botany nor chemistry having yet furnished the answers expected from them, we pathologists are for the present compelled to admit our lack of knowledge and to declare ourselves opposed

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to an undefined, undemonstrated, hypothetical Unknown. It is true, this does not seem so to all. There are some authorities in science, who have—to their own satisfaction at least—discovered the solutions to the above-mentioned problems. The scientific value of these conclusions is, however, considerably lessened by the fact that a large number of investigators doubt their claim to consideration, and regard it as more advisable to confess our ignorance for the present; others—like DeBary—deny their scientific value altogether. The following are the words of the latter, written only a few years ago: "Of the fungi which inhabit the living body, and with whose development certain diseases and modes of death of animals are connected, we know numerous forms and species, but yet very little of their origin or life-history. Until the question, *how*, *whence*, and under what conditions the parasite arises and becomes attached to his host, is clearly and fully answered, we are in no position to form a correct judgment of the etiological relations between the fungus and the disease."

Since, then, we know at present neither the number and kinds of skin diseases depending upon parasites, nor the number and varieties of the parasites and their relation to other structures existing in the organic world, nor even the manner of their action upon organs and tissues; since no one of the questions above referred to has yet been satisfactorily answered, and only a few isolated, naked facts are known, it only remains for us to briefly sketch the history of the events connected with this subject, and to examine those results and opinions which appear to bear upon the hoped-for solution of these vexing problems.

As once before happened in the history of medicine,* human pathology profited a second time by a suggestion coming from veterinary art, when in 1835 Bassi and Balsamo discovered in the botritis Bassiani the cause of the silk-worm disease "Muscardine." Since in this case a fungoid organism was demonstrated as the cause and disseminator of an animal disease, the same relation might exist, it was thought, in other contagious diseases.

An affection long recognized as contagious, and known under the names of favus and porrigo, first attracted attention in this connection, and in 1839, Schœnlein first recognized and accurately described the fungoid elements of this disease, Remak having two years previously also described these same elements, without recognizing their parasitic nature.

The discovery of the parasite of favus—named by Remak, *achorion Schœnleinii*, in honor of its discoverer—was quickly followed by similar discoveries for a series of other skin affections. Thus Gruby, in 1843, and Malmsten, found a parasite in the disease described by Cazenave under the name of herpes tonsurans (Porrigo scutulata of Willan—Tinea tondens, Mahon—Ringworm). Günsberg also, in 1843, found a fungus in plica; Gruby, in 1842, one in sycosis; Lebert, in 1845, one occurring in an ulcerated condition of the feet; Eichstedt discovered the parasite in pityriasis

* The discovery of the acarus in scabies.

versicolor in 1846; Gruby that in tinea decalvans (alopecia areata) in 1843, and numerous others.

All research in this direction was limited to the establishment of the simple fact that in the diseases mentioned a vegetable organism was found, and to a description of the organism discovered. The very important, and ever-present question, whether these structures were to be considered as essential etiological elements of the diseases in question, or merely as adventitious,—accidentally present,—was promptly decided in favor of the former view; for had not the causal relation of the fungus *botrytis* to the disease muscardine been clearly established? The investigations of Remak, who demonstrated the possibility of conveying favus from one person to another by means of the fungus, gave additional color to this view. In the face of this evidence, the doubts as to the existence and etiological value of these organisms held by clinicians like Cazenave, were altogether without force.

The at least equally important question of the botanical relations of these structures was quickly settled. They were considered as so many distinct and separate species. As the various diseases represented pathologically and clinically separate varieties, so too, each of the parasitic forms found in certain of them was considered as pathognomonically belonging to the disease with which it was found associated, and was represented as a particular species of the class *fungi*.

Thus, the following were regarded as distinct species: achorion Schœnleinii (Remak), or oidium Schœnleinii (Lebert), or mycoderme de la teigne (Gruby),—the fungus of favus; trichophyton tonsurans, or trichomyces tonsurans (Malmsten),—the parasite in herpes tonsurans; trichophyton sporuloides (Robin),—the fungus in the sticky mass of plica polonica; trichophyton ulcerum (Robin),—the fungus discovered by Lebert in chronic ulcers of the feet; microsporon Audouinii (Gruby), or trichomyces decalvans (Malmsten),—the parasite of porrigo decalvans; microsporon mentagraphytes (Robin), said to have been found by Gruby in sycosis; microsporon furfur (Robin),—discovered by Eichstedt in pityriasis versicolor; and finally one found by Ardsten in addition to the achorion in favus,—puccinia favi.

This was the condition of things at the beginning of the second half of the present century; the results of the numerous investigations were limited to the single fact of the discovery of fungi and their diffusion in the epidermis and hairs, and the comparison of the various observations with one another. In certain cases, the assertions of the presence of parasites were proved to be erroneous, as will be more particularly shown in the sequel. But for the sake of clearness I will state here, that of the fungi above named, those in alopecia areata, ulceration of the feet, and in plica,—which latter in fact does not exist as a disease at all,—have not been substantiated; furthermore the existence of a parasite in sycosis can only be maintained in a very limited sense; and finally, puccinia favi represents only an accidental addition to the favus fungus.

That the structures mentioned were to be regarded as species of fungi, could not be for a moment doubted. They were distinguished, like the latter, by being destitute of chlorophyll, and consisted, generally, of single or single and branched rows of concatenated, cellular elements, and single and branched thread-like structures, resembling the numerous well-known fungi freely vegetating in nature apart from the human body.

Although the essential morphological characters presented by the latter organisms were, very many of them, wanting in the above-mentioned parasitic structures, the classification of these did not offer any difficulties to the botanist. In the work of Robin, published in 1853, the descriptive portion of which remains valuable at the present day, they are separated into species of fungi based upon their pathological habitat, and designated under the names given above. The vegetable growths found upon mucous membranes, on the other hand, which presented themselves as uni- or polycellular—psorosperms, sarcinæ,—or as filamentose structures,—leptothrix buccalis, —were classed with the *algæ*.

In the matter of classification, or the determination of the botanical position of these organisms, the pathologists simply followed the botanists, just as the latter simply accepted and registered the alleged discoveries of physicians regarding their pathological connections.

This basis of classification, according to which the fungi were differentiated by their clinical relations, and not according to their botanical characters, could not be long maintained ; for, as early as 1850, Lowe had shown that the fungus of herpes tonsurans was only a spore-bearing variety of the favus-parasite, and that both were derived from aspergillus, a species of common mould. Hebra, in an essay published in 1854, suggested an intimate relationship between the fungi of favus and ringworm on the one hand, and the ordinary mould-fungi on the other. He was led to this inference by repeatedly observing the formation of ringworm-like circles and favus scutula after the continued application of moist, mould-generating cataplasms. These views, to be sure, did not rise above the level of mere conjecture, and even as such, were based upon the then universally accepted classification of the fungi. With the outlines of this classification, and the basis upon which it rests, we must now acquaint ourselves.

The fungi were, above all, strictly separated from the algæ, and declared to be radically different from them. They differ from the latter in being devoid of chlorophyll. For this reason they are unable to take up and assimilate the elements necessary to their development from the inorganic world, but can only assimilate prepared organic substances. Hence, they are compelled to derive the materials necessary to their existence from, and at the expense of, other organisms.

One group has its habitat among dead and decaying organic matter ; they are termed *saprophytes*,—inhabitants of decay.

A second group find food and lodgment upon living organisms, animal or vegetable ; these are the *parasites*.

Morphologically, fungi consist of cellular threads, destitute of chlorophyll,—the mycelial threads,—either single or branched, often interlaced or fused together. This represents the vegetative portion of the fungus,—the mycelium or thallus. Besides this vegetative portion we recognize the fructifying portion, which presents itself in very various forms, and which serves as the most essential differentiating mark between the different varieties of fungi.

As the relation apparently existing between the parasites of the human skin and the ordinary mould-fungi had been pointed out about a quarter of a century ago, and as, moreover, the former have since that time attained to a high importance in mycology, we will first describe the ordinary mould-fungus,—penicillium crustaceum (Fries).

From the horizontal, interlaced mycelium arises a perpendicular branch, the hypha; this divides into two filaments, each of which forms two basidia; from these arise three conical spore-bearers—the sterigmata; upon the latter grow serial aggregations of spheroid cells, like strings of beads; these are the *spores*.

The whole structure described, basidia, sterigmata and spores, are known currently as the organ of fructification; but the single spores, in a measure, as the seed or fruit; these spores become detached, and upon suitable soil grow to other mycelia, from which again the same tufted organism may be developed. As the whole structure bears some resemblance to a small brush, the fungus fructifying in this manner was named Penicillium glaucum (Link), or Penicillium crustaceum (Fries).

In addition to this mode of reproduction by seed-formation, there is another way in which the fungus may grow, increase, and diffuse itself. Thus, from the mycelial threads spheroidal buds may arise, which become detached as globose cells, and again develop into mycelium, and thus the same cycle of development may be repeated again and again. This mode of propagation, by means of so-called *conidia*, was, however, regarded as an imperfect reproduction, dependent on the medium upon or in which the fungus was placed, its nourishment, the temperature, humidity, or other unfavorable influences to which it might be exposed, for, as soon as the conditions of life became more favorable, the tuft-like fructifying organs would again be developed. These latter alone represented the systematic fructification of this fungus, and at the same time, its specific character.

The same holds true for other mould-fungi—aspergillus, mucor, etc.

Regarding the classification of the fungi of favus, ringworm, etc., the perplexing fact remained that fructification by means of reproductive organs had never been observed in them. Their only mode of reproduction was by budding,—the formation of conidia.

The conjecture of Hebra, that the parasites in favus and herpes tonsurans, and the common mould-fungus belonged to the same category opened up a new road by which to study the parasitic diseases of the skin. In the first place, the nature of the ordinary

moulds and their direct influence upon the human skin were to be observed, and on the other hand, the relations supposed to exist between the dermatophytæ and the ordinary mould-fungi were to be elucidated.

It would only further complicate an already very complex subject if I were to refer to all the studies and experiments which have been made with the purpose of solving these problems, or discuss all the clinical facts urged for or against the supposed identity of favus and herpes tonsurans.

We will concern ourselves here only with the efforts made to determine the botanical position of the dermatophytæ, since the former question cannot be settled until the biological relations of these organisms are accurately defined. This latter subject has, however, grown to such vast proportions with the progressive accumulation of scientific facts, that it may suffice to recount here only the principal results of the studies bearing thereon.

It seemed, indeed, for a time as if the endeavors in this direction were to be crowned with success. With many negative results (Köbner), there were also positive successes to chronicle. Penicillium sown upon the skin had given rise to ringworm-like circles (Pick); the attempt to cultivate herpes tonsurans from favus had been successful (Pick, Köbner, Peyritsch); "Microscopic scutula" (Pick) had been obtained after the inoculation of herpes tonsurans, and finally, it was stated that by the cultivation of the favus fungus, penicillium had been obtained.

Thus far, then, clinical observation and the results of experiment appeared to coincide: the fundamental notion first postulated by Hebra, and afterwards rendered axiomatically by Lowe, seemed, on the whole, plausible. According to this theory, the parasites of favus and herpes tonsurans represented only different stages of development of the same fungus, and favus and ringworm different phases of the same disease, which appeared now as favus, then as ringworm, at another time as a combination of the two; finally, the fungus of this skin disease was descended from one of the ordinary mould-fungi, probably penicillium or aspergillus.

But upon closer examination of these results and the means by which they were obtained, the question did not yet appear to be conclusively settled. The "herpetic" rings obtained in these culture-experiments were not regarded by all observers as identical with herpes tonsurans, many considering them as representing a different disease. The "microscopic scutula" obtained after the inoculation of ringworm, reminded one as little of true favus, as did the crust, "not distinguishable from favus," which Zürn professes to have obtained by cultivating penicillium upon the skin of a rabbit.

There was, however, a perplexing circumstance connected with the alleged demonstration of the indentity of the parasite in favus and the mould-fungi; one observer (Pick) obtained penicillium and aspergillus from the cultivation of achorion; another (Lowe) only aspergillus; a third (Hoffmann) found mucor, besides penicillium and aspergillus; while the efforts of a fourth (Neumann) were

rewarded by as many as *ten* different varieties of fungi. These results led to the accusation of "depravation of material" being hurled at each other by the different investigators. As the various fructifying forms of fungi above enumerated were held to be so many separate species, it became necessary to consider the causes of the occasional success of these attempts at cultivation, and of the wide divergence in the results obtained. The accidental admixture of penicillium, mucor and aspergillus, when these fungi were found, was, of course, possible.

These failures to demonstrate the identity of the fungi of favus, ringworm, and common mould, could not, however, shake the theory suggested by Hebra in 1854. On the contrary, this hypothesis, first suggested by clinical observation, has received considerable support from the discovery of certain botanical facts relating to the nature and habits of fungi. I refer to the so-called *polymorphism* of these structures.

Until the beginning of the second half of the present century, the doctrine was accepted without dissent that each fungoid species developed only one kind of fructifying organs, and could only produce one kind of spores, just as a phanerogamic plant could produce but one kind of seed. The discovery was made in 1851, by Tulasne, not only that one species of fungi may have several different kinds of spores, but also, that in a large family of fungi—pyrenomycetes,—several different forms of reproductive organs are developed constantly and in a definite succession. He showed that a number of varieties which had heretofore been established on the basis of a single form of spores for each species, were only different morphological groups (*Form-genera*, DeBary,) belonging to one species. This polymorphism of the reproductive organs, first demonstrated by Tulasne, was soon afterwards verified and extended by himself and other observers (Kühn, DeBary, etc.).

A definite regular succession of this organic polymorphy has been shown to take place in the following manner: one kind of reproductive organs is succeeded by another, and this again by a different one, and so on until the series is brought to a terminal form, which reproduces the initial variety, when the same cycle is repeated; in short a kind of *alternation of generation*.

As one of the best known examples of the regularity of polymorphism we will here describe that shown by DeBary to take place in puccinia graminis. Summer-spores are first produced which cause the plant to increase very rapidly; in the autumn the same mycelium bears winter-spores,—termed, by DeBary, *teleutospores*. These, however, cannot again germinate upon graminacea, but only upon the barberry-bush, where they give rise to the fungus formerly known as æcidium berberidis. The spores of the latter again germinate upon graminacea and develop into puccinia.

The establishment of the occurrence of polymorphism in many fungi placed the whole previous system of classification upon a very shaky foundation. No one could be certain that even what appeared to be the most firmly established *species*, would not some day be

shown to be only a developmental stage of a higher fungus. These results of the study of the biological relations of the various fungi, as soon as they became known, were immediately objects of intense importance to pathologists, for now the seeming identity of favus and herpes tonsurans, suggested by their occasional clinical connection, might be demonstrated to exist beyond doubt, and all the parasites found in various skin diseases shown to be merely transition forms of a higher mould fungus.

About the same time a large number of microscopic organisms which had formerly been regarded as strictly separated from the fungi, were elevated into a prominent position in pathology, and speedily also attained great importance in the domain of mycology.

First, then, we must concern ourselves with the most minute organisms, whose best known representatives are severally known under the names of micrococcus, bacterium termo, monas crepusculum, spirillum, etc., but which are collectively known, from their manner of increase, as the *Schizomycetes* (*schizo = I split*).

Secondly, we have to do with those peculiar cellular structures which represent yeast, and whose biological position is regarded by most botanists as an altogether isolated one, though some investigators believe they can with certainty define their nature and relations to the fungi.

These minute organisms became of great importance for the subject we are considering, because the attempt has been made to show a biological connection between them and the higher fungi on the one hand, and the parasites found in skin diseases on the other. The study of their morphological structure and specific importance became, however, a task of extreme difficulty, because—owing to the discovery of a number of real or imaginary facts—very many, it might be said, nearly all, pathological and even physiological actions going on in the human body were dragged into the sphere of parasitic processes, that is to say, these actions were asserted to be the functions of the minute organisms referred to, in about the same sense as the alcoholic fermentation was supposed to be due to the action of the yeast-cells.

In cholera, variola, vaccinia, erysipelas, scarlatina, measles, typhus, hydrophobia, embolism, pyæmia, anthrax and many other pathological conditions, such organisms have been demonstrated and considered as the contagia or contagium-bearers; accepted in the broadest sense, these diseases were considered as parasitic, although their clinical behavior lends no support to such an assumption.

The question of the significance of these structures, their biological relations, and their influence upon the animal organism, have occupied science for over a decade of years, and chemists and botanists have been active in about the same measure as pathologists. Various answers to these questions, differing in their degree of completeness, as well as representing the most divergent views, have also been offered. The most elaborate answer to the questions above proposed is, without doubt, that given by Hallier. His

views, pronounced with great positiveness, have won a large number of adherents among clinicians and pathologists; for this reason we must here give a brief outline of them, although modern botanical investigators deny their value altogether.

Hallier, basing his demonstration upon the history of their development, showed that the organisms found in morbid processes, and hitherto described as monas crepusculum, bacterium termo, vibrio, bacterium, bacteridium, spirillum, torula, leptothrix, mycrozymen, etc., also the different ferments, as oidium, saccharomyces, hormiscium, and finally, the ordinary moulds, as penicillium, aspergillus, etc., did not represent, each, a separate *species* of plant, but only different developmental stages of a definite fungus representing each of these classes. From the lowest form of each of these species, the fructifying radical form may be developed.

According to Hallier, there arise from the fungi, under certain conditions, three distinct vegetative forms,—*Morphs:* 1. When they are entirely exposed to the air—ærophytes, 2. When they are half submerged in fluid and the air is partially prevented from reaching them,—semi-ærophytes, and, 3. When they are entirely surrounded by fluid,—anærophytes. If we submerge a spore-cell,—conidia,—of a fungus, such as penicillium, in a fluid not injurious to its life, it becomes an anærophyte, and consequently does not vegetate in the same manner as in the open air; the cell swells up, its nucleus and protoplasm divide and sub-divide, and a number of small spheroid granules results; the cell finally bursts and empties its granular contents. These minute bodies are termed by Hallier, *Micrococcus* (nuclear-yeast cells). The micrococcus-cells swarm about in the liquid for a time. Then coming to a rest they grow and multiply by subdivision,—schizomycetes, or are collected into rouleaux or chains,—leptothrix, or they are enveloped by a gelatinous mass secreted by themselves, — zooglea (Cohn), or finally, the single micrococci develop into minute, rod-like structures, — bacteria.

In a fermentable fluid, these forms may develop into true yeast (bottom-yeast), *i. e.*, micrococcus, cryptococcus, or arthrococcus. When the fermentation and liberation of gases goes on rapidly, these bodies are carried to the surface and develop into oidium forms — torula, hormiscium — arborescent series of cells termed jointed mould,—semi-ærophytes. Upon suitable soil and fully exposed to the air, each of these varieties may develop into the root-form — ærophyte. Micrococcus and its anærophytic forms — leptothrix, bacterium, spirillum, etc., cause all miasmatic, contagious, and infectious diseases, having, like ferments upon other organic substrata, a zymotic, decomposing, morbific action upon the tissues and fluids of the body.

It is therefore clear, according to Hallier, why only anærophytic fungoid forms are found within the body, the blood, tissues, etc., and why upon the epidermis occur only the oidium forms, semi-ærophytes, as in favus, ringworm, pityriasis versicolor, etc. Asserting his ability to determine the root-form to which the micrococcus

present in any disease belongs, Hallier defined in advance the etiological fungus for a large number of contagious diseases from the micrococcus present in those diseases.

Hence, according to him, favus is caused by penicillium, herpes tonsurans by ustilago carbo (which is merely a variety—morph—of aspergillus), pityriasis versicolor likewise by aspergillus, sheep-pock by pleospora herbarum, variola by sporidesmium stemphylium, etc., typhus, cholera, syphilis, gonorrhœa, etc., are likewise each caused by a fungoid form, partly already known, partly first discovered by him.

This fascinating doctrine of Hallier made an uncommonly favorable impression upon physicians, for in every disease the particular fungus present was demonstrated in a definite and systematic manner, which left nothing unaccounted for. The first result of Hallier's teaching was that a considerable number of pathologists entered on the path of discovery pointed out by him; but this happened in many cases with such frivolous methods, and such extraordinary things were brought to light, that these results, many of which were produced under the direction of Hallier himself, brought his own researches into discredit. For, so it was asserted, there was no single morbid process, from warts, eczema, psoriasis, prurigo, pruritus cutaneus, to inflammation, erysipelas, etc., which was not caused by a parasitic fungus.

Two years ago I had the honor of discussing in this hall the grave objections which arise against Hallier's methods and results. Let it suffice to state here that the anticipations of physicians are not fulfilled even by his own demonstrations. Clinically distinct diseases are not caused by botanically distinct species of fungi, according to Hallier's teaching; but, on the contrary, all the different parasites which occur upon, or in the body of man, are by him reducible to four varieties. Two of these, diplosporium fuscum and stemphylium, have been first advanced by him, but are not recognized by other botanists. The two remaining varieties, penicillium and aspergillus, are, in his opinion, convertible into each other. There remains, then, only the ordinary mould, by which, in its various developmental phases, the most different contagious and infectious diseases are caused.

But to Hallier even this mould does not represent a strictly defined species; for, in another place, he allows to penicillium and aspergillus only the importance of a vegetative form in a great developmental series, which for penicillium is as follows:

Penicillium	=	Acrospore;
Mucor racemosus	=	Thecaspore;
Tilletia caries	=	Anærophytic generation;
Achlya	=	Sexual generation;

to which is added as a fifth step in the series: Arthrospores, and the schizo—sporangial form—cladosporium.

But what is of importance for the whole doctrine of the mycoses in general, and not alone for dermatology, is whether mycologically the parasite of favus is identical with that of herpes

tonsurans, inasmuch as clinically the two diseases appear closely related, and here the results arrived at by Hallier are really surprising, although not in the sense anticipated. After Hallier had, in 1866, derived favus and herpes tonsurans from one and the same fungus, namely, *penicillium*, the former from its achorion form and the latter from its acrospore, he, one year later, in 1867, made the parasite of herpes tonsurans descend from the *aspergillus*, from which he also derived the parasite of pityriasis versicolor ; the *microsporon furfur* of the latter came from the yeast of oidium spores (ustilago spores), while the trichophyton, represented the oidium itself in the morphological series ; aspergillus—eurotium—ustilago.

Now, from a clinical point of view it is quite probable that favus and herpes tonsurans are associated with but one species of fungus, and it is also conceivable that pityriasis versicolor may be only a variation of the two former ; but we must as clinicians decidedly express our dissent from the proposition that favus and ringworm have nothing in common, while the latter and pityriasis have the same origin,—as Hallier asserts he has demonstrated from the botanical relations of the fungi present in these diseases.

If, then, the doctrines of Hallier are shown to have such a precarious value from a clinical standpoint, pathologists must the more hesitate before accepting them, when they find them characterized as absolutely valueless by such distinguished botanists and mycologists as DeBary, Hoffmann, Bonorden, or even such as Bail and Berkeley, who agree with him upon certain points, for example, the derivation of yeast from the fungi. It must be remembered that a botanist of DeBary's skill never succeeded in cultivating ferments from mould-fungi, that a mycologist such as Hoffmann never could verify the discovery of vegetable organisms in scarlatina, diphtheria, vaccinia, etc., free from " the suspicion of external admixture," also that neither of these investigators ever succeeded in observing micrococcus swarming from fungus spores, while disciples of Hallier boast of the extraordinary performance of having produced this result, *macroscopically*, within a very few hours.

It is not in our sphere nor is this the place to more closely examine the scientific inadequacy of the doctrines of Hallier. The hints thrown out may suffice to justify the doubts which we, as pathologists, are compelled to entertain regarding them.

But we would, on no account, deny the possibility, that a portion of the doctrines of Hallier, and perhaps just that portion of most interest to us, may in the course of time prove to be true. For the clinical fact remains, that under the probable influence of mould-fungi herpes tonsurans rings and favus do arise, and that these two diseases may co-exist. The explanation of this fact remains to be given. And, as we shall see further on, the latest botanical researches show that, sometimes at least, algæ may partially change into fungi.

However general and decisive the opposition of most botanists is to Hallier's conception of the relation of the schizomycetes to

the dermatophytæ and the moulds, the doctrines of other investigators concerning the relations of these structures, are less open objections. Most of the botanists and pathologists of twenty years ago strictly separate the schizomycetes from the fungi, and stoutly deny the possibility of the development of the former from the latter. Prominent among the opponents of Hallier's doctrine, may be named Ferdinand Cohn. His researches upon bacteria, begun in 1853 and concluded by further publications in 1872–73, possess great weight among those qualified to judge, and demand respect as the results of exact and scientific observation. Fully recognizing the services of Hallier, "who first suggested the question of the relation of the ferments and contagia to the bacteria," and who was the leader of a series of investigators in this field, Cohn declares that the material collected by Hallier himself is useless, on account of the known defects in his system of investigation, and that the Hallerian doctrine of micrococcus, is, as shown by DeBary and Hoffmann, so interwoven with incorrect assertions and untenable hypotheses, as to make a study of his actual observations substantially impossible.

According to Cohn, bacteria are globular, oblong, or cylindrical, occasionally crooked or twisted cells, destitute of chlorophyll, which increase exclusively by division, and vegetate either singly or in cell families. They constitute, according to this observer, a family, for which he proposes the name of *Schizophytæ*. They have no direct genetic connection with the yeast fungi, nor on the other hand, with the moulds. By exact investigation, microscopic and experimental, it has been proven that bacteria never develop into mycelial fungi. Finally, Cohn has arrived at the conviction, in spite of the difficulties in the way, that the numerous forms of bacteria are as readily divided into distinct varieties as the lower plants and animals. Accordingly he divides them into four tribes: Sphærobacteria, microbacteria, desmobacteria, and spirobacteria, which he represents and describes as strictly defined varieties.

Among these the ones most important for us to consider are the zymogenes, *i. e.*, ferments, and the pathogenes, *i. e.*, spherical bacteria found in various morbid processes. Both of these varieties are represented as *causes* of the morbid processes, the former as ferments, and the latter as contagia in different diseases. We find, however, that this separation is not made on account of the different morphological or biological properties of the organisms mentioned, but, on account of their, so to speak, "physiological function." Since one kind is found in diphtheritis, and another in variola, therefore the former are the contagion of diphtheritis, the latter of variola, etc., both are contagia, but differ from each other because diphtheritis and variola are different morbid processes.

Cohn admits the classification of these structures according to their pathological habitat, for he says: "The bacteria characterizing different contagia, sometimes agree in form with those of uric or butyric acid fermentation, sometimes with those in coloring matters (pigment-bacteria);" and he believes furthermore, that

we cannot yet give a conclusive answer to the question, whether one and the same bacterium-germ, according to its different substratum, at one time alkaline at another acid, in alcoholic or putrefactive fermentation, may not cause either anthrax or diphtheria, although Cohn himself considers this as "not probable."

Let us add, that the relation of yeast to fermentation and putrefaction is not yet clearly understood; that according to numerous late researches, the proliferation of yeast-cells and the schizomycetes may take place independently of putrefaction and fermentation; further, that the processes taking place in zymotic diseases, offer, perhaps, an analogy but certainly no identity to putrefaction and fermentation; finally, that the discovery of micro-organisms in zymotic diseases, so far as these discoveries are reliable, certainly does not demonstrate that these structures are actually the contagion—the cause of the disease. Considering all this we are compelled to conclude, at present, according to the doctrine of specificity of Cohn, that, first, the part taken by the schizophytæ in contagious diseases is yet unproven, and secondly, that it is quite as little shown, whether these organisms are genetically connected with the higher fungi or whether they represent one or different varieties of plant.

This uncertainty will become still more marked if we consider that a large number of investigators, represented by Klebs and Billroth, separate all the above-named organisms from the higher fungi, but yet allow them to develop into each other; another class separates a portion of them as animalcules (Rindfleisch), while others still (Karstens) consider them as histological elements (cells) from the human body.

The results of our study thus far are therefore only two: According to Hallier the fungi of the parasitic dermatoses originate from the moulds, and are connected with the ferments and schizomycetes. This view is, however, declared to be entirely wrong by the most scientific botanists, and it likewise does not, in its present state, answer the demands of pathology. According to Cohn and another group of investigators, the schizomycetes are in part excitors of disease, but are not related to the ferments nor to the mould-fungi, and therefore have no connection with the already known dermatophytæ; he claims that a particular microphyte corresponds to each separate morbid process. Nevertheless, without denying the correctness of the single facts, the gaps and hypotheses are here also so numerous that the doctrines of Cohn fail to decide the questions concerning parasitic fungi in either a botanical or pathological relation.

Recently, mycology seems to have undergone a new and sweeping change in a direction hardly anticipated, a change completely followed by Sachs in his recently-published "Text-book of Botany." It is impossible to say how far Hallier's doctrine of extensive polymorphism may not find strong and scientific support, from the results of this movement. It is known that the thallophytes increase by means of brood-cells or gonidia; these arise from

the thallus filaments by simple constriction, or from spore-bearers which arise from the hypha (basidia, sterigmata), as in penicillium.

Besides this, however, there occurs in most thallophytes, a sexual fructification (gamogenesis), opposed to which the mode of reproduction above referred to must be considered asexual (agamogenesis). The fundamental process in the sexual reproduction consists in this: that two essentially different cells, a female (oogonium, oosphere, carpogonium) and a male cell (antheridium, pollinodium) unite, and form an organ of fructification, as in the phanerogams. From this, the spores—reproductive cells—are developed.

The reproductive cells of the former variety, which arise by agamogenesis, are therefore not true spores, but gonidia.

Sachs writes as follows, in regard to this relation: "In many cases, especially in many fungi, the reproduction takes place almost exclusively by means of such brood-cells (gonidia), while only under the most favorable circumstances the normal conclusion of development,—by sexual organs and fructification, is reached. Hence it is, that in many thallophytes the sexual organs are not even known, while their brood-cells are everywhere found. It is therefore a very ticklish matter, in the present state of science, to assert of any thallophyte that it possesses no sexual organs, since even in the commonest moulds and in many algæ, whose gonidia have long been known, the sexual organs and resulting fructification have only recently been discovered."

The latter statement is especially applicable to the common mould, penicillium. As before stated, it is this fungus which has from various points, at one time from clinical observation, at another from the results of so-called cultivation, been brought into genetic relationship with the parasites occurring in favus, herpes tonsurans, etc. It is therefore particularly important for us to know, that the "tuft" of penicillium which has hitherto been regarded as its characteristic fructifying organ, is not so in an absolute sense.

As Brefeld has shown, the familiar brush form of penicillium is only the first step in the evolution of this fungus. The mycelium sends forth perpendicular hyphæ from which spring basidia and sterigmata. Upon these are developed the moniliform rows of gonidia, constituting the tuft. If, however, the excessive formation of gonidia is prevented by the exclusion of air, sexual organs develop upon the luxuriantly-vegetating mycelium. These agree essentially with those demonstrated by DeBary upon eurotium, and consist of a female, spiral ascogon, and a male pollinodium. From the impregnated ascogon a peculiar body—a small truffle—grows. In this sexual generation consists the typical development of penicillium. When then, under certain circumstances, for example in cultivations, organisms with tufts of gonidia are seen, these may represent either an admixture of penicillium or some other fungus.

For it is known that several other fungi may produce the tuft-like collections of gonidia, without this being characteristic of any species. Only the sexual fructification is decisive as to the species.

According to Sachs, we can at present distinguish only two

classes of thallophytes: algæ and fungi. Hitherto all thallophytes containing chlorophyll have been classed as algæ; all those destitute of chlorophyll as fungi. This distinction cannot be maintained at the present day, since morphology and evolution have taught that fungi have originated by branching off from various types of algæ.

Our considerations are therefore confined to the question: whether sexual organs are formed at all in any particular case, and "in what manner the sexual act influences the entire course of development." Hereafter the sexual conformations will therefore have to be taken as a leading element in the classification of the thallophytes; for it becomes more and more probable that every so-called species of fungus represents only an intermediate form of its evolution in the propagation by means of gonidia, and that the typical end of its development is found only in the sexual fructification.

Relative to the more accurate classification of the fungi causing the parasitic dermatoses, it may be said that such classification must remain for the present uncertain, until we have definite knowledge of their evolution, especially of their fructification, and, eventually, of their sexual fructifying organs.

Until then, it will be proper to hold to the actual facts, on which De Bary based the following words ten years ago, concerning the parasites of the skin:

"A question which must be discussed in this place, is, whether the fungi referred to (of favus, ringworm, etc.) really belong to distinct and true species or not. What is known of their organs at present is, that they are simply mycelial threads, whose branches divide into rows or chains of germinal spores, somewhat like the mycelial filaments of mucor mucedo, from which the moniliform brood-cells are constructed. True fructifying organs, characterizing the species, are not known, and we are obliged to seek for the complete fructification in other places, in fact, in the known fungoid forms.

"If we cultivate the parasite taken from the animal body in water, solution of sugar, etc., the germination of its spores is observed, and in a short time different moulds, penicillium glaucum, aspergillus glaucus, or yeast-cells appear in the solution. The latter, and the mycelial threads of penicillium resembled more or less the spores and mycelium of the parasites in question. They are in immediate contact with these, so that it seems as if they were developed from them after alteration of the medium in which they vegetate. Hence, the view maintained, especially in England and carried to an absurd extreme by Tilbury Fox, that achorion, trichophyton, etc., are nothing but gonidia-forming mycelia of ordinary mould, and yeast fungi, especially penicillium, hormiscium cerevisiæ, etc., developed upon an animal body especially predisposed in some manner to their cultivation. According to the special predisposition of the body, the same fungus may develop into achorion or trichophyton, etc.

"If we reflect how uncommonly often penicillium and hormiscium cerevisiæ appear in the most carefully guarded 'cultivations,' and that these have arisen from their wide spread germs; if we further bear in mind that the exclusion of such germs from the culture-objects in question is an impossibility, and that the mycelium of penicillium may easily be mistaken for that of other fungi, even by practised mycologists, and yeast-cells confounded with spores, the opinion above referred to, as it is held by professed non-mycologists, becomes highly improbable.

"Whether aspergillus, penicillium glaucum, and hormiscium cerevisiæ are true fructifying species of fungi or not may be left out of consideration. At all events, the above views must be held to be unproved, and the fungi in question considered as true specific parasites, until it is shown experimentally that undoubted favus, ringworm, etc., arise from the cultivation of penicillium, torula, etc., upon a suitable epidermis, in conjunction with the characteristic parasite, or that from the cultivation of the latter, another dermal parasite is produced."

From this rough draught of the mycology of to-day, we see that we are, despite of the many asserted results of cultivation, far from being able to define the relations occupied by the fungoid organisms in the parasitic dermatoses to one another, to the moulds, and to the numerous class of the thallophytæ.

If, therefore, single pathologists here and there have raised to a certainty Hebra's suggestion of the identity of favus and herpes tonsurans, and even extend the same to pityriasis versicolor, it is important to show that they are not supported by scientific botany at the present day.

Since, then, the partial similarity between the diseases favus and herpes tonsurans does not justify physicians in considering these processes as clinically identical, but since, on the contrary, very important differences exist between the two diseases, and they have been, as a matter of fact, kept clinically separate, it follows, of course, from the above considerations that we must regard the vegetable parasites of the skin in the light of our present knowledge as distinct entities and the diseases produced by them as distinct and separate morbid processes; and this so long as their relationship to other forms has not been demonstrated.

And it follows, finally, that from the pathological stand-point we will be most safe and right if we regard and treat the above considered parasitic organisms not as simply an addition to, nor simply as an etiological element of favus or ringworm, but as essential symptoms and parts of the respective diseases, which belong as necessarily to the diseases as the redness, scaling, etc., and which, combined with changes of nutrition in the skin, first constitutes the collective expression of the disease.

Digest of Literature.

I.

DISEASES OF THE SKIN.

ANATOMY, PHYSIOLOGY AND PATHOLOGY.

BY A. R. ROBINSON, M. D.

1. **Bizzozero.**—A contribution to the study of giant-cells. Gaz. delle Cliniche di Torino. (So Sperimentale, Feb., 1876.)

2. **Butlin, H.**—On the minute anatomy of two cases of carcinoma of the breast, preceded by eczema of the nipple. Royal Med. & Chirurg. Soc. Med. Times & Gazette, Feb. 10, 1877.

3. **Dittevsen, J. G.**—Contribution to the knowledge of the nerves of the epidermis. Nord. Med. Arkiv., Bd., VIII., No. 4, 1876. (Rev. des Sciences Med., Jan., 1877.)

4. **Dittevsen, J. G.**—The termination of the tactile nerves in men, and the vertebrates. Nord. Med. Arkiv., Bd., VIII., No. 11, 1876. (Rev. des Sciences Med., Jan., 1877.)

5. **Feinberg.**—The influence of mechanical, chemical and electrical irritation of the skin on the animal organism. Centralblatt f. d. Med. Wissen., Sept. 23, 1876.

6. **Heitzmann, Chas.**—The development of cancer-cells. New York Path. Society. New York Medical Record, Nov. 4, 1876.

7. **Krohn, H.**—The course of nerves under the pavement epithelium. Nord. Med. Arkiv., Bd. VIII., No. 13. Revue des Sciences Med., Jan., 1877.

8. **Lalanne, L.**—The duration of tactile sensation. Journ. de l'Anat. et de la Physiol., Sept., 1876.

9. **Norris, W. F.**—A new method of double staining. Am. Jour. Med. Sciences, January, 1877.

10. **Rabl, J.**—Granulation tissue and its significance for scrofula. Med. Jahrbücher, 1876, II., Heft.

11. **Simon, Jules.**—Absorption of iodine by the skin. Gaz. Hebd., May 12, 1876.

Bizzozero (1) describes an unusual kind of tumor which had its

seat in the right labium, which he called an elephantiasis tuberosa, and which could be considered an exaggerated hypertrophy of the corium. In some parts of the tumor could be seen a great number of gigantic cells of variable form, isolated or grouped, with their protoplasm full of fat drops, and with from 2 to 15 or more nuclei within the cell-body. The tumor was simply a hypertrophy of the connective tissue-cells, as all gradations in size were observed in the cells from that of the normal connective tissue-cell to that of the largest giant-cells. Such a histological condition has never previously been observed in elephantiasis.

In both the cancers examined by BUTLIN (2) there was dilatation of the ducts and alteration and proliferation of the epithelium; infiltration of the surrounding connective tissue with small cells; dilatation of the small ducts and acini, with proliferation of their epithelium, fusion of the acini and ducts thus filled up, into large and irregular spaces, and escape of the contents or their growth into the surrounding tissue. No connection was to be observed between the cells of the connective tissue and the new epithelial-like cells. Therefore, the author held that cancer in this region is essentially a disease of the epithelium of the mammary gland, and in these cases was thought to travel from the surface of the nipple and areola through certain of the ducts to the smaller ducts and acini.

DITTEVSEN (3, 4) says the nerve filaments traverse the epidermis as far as the external limit of the corneous layer, where they terminate in a sort of infundibuliform cavity. Examined with a high power at the place where the nerves enter the epidermis, the nerve bundles appear formed of multiple distinct fibres, all terminating in nerve-cells placed in the middle of the epithelial-cells of the different layers of the epidermis. The first of these nerve-cells are the largest, and are placed on every side of the bundles in the deep part of the rete mucosa. They are also found in all parts of the epidermis, even to the surface of the corneous layer.

FEINBERG (5) divides the irritation into three categories, according to the symptoms produced: 1. Slight irritation, confined to limited portions of the skin; 2. Moderately strong irritation over large skin surfaces; 3. Intense irritations which affect the entire cutis.

Irritation of the first category produces momentarily a reduction of several degrees in the temperature of the affected part, which is soon followed by a rise of temperature which lasts several hours. The temperature of the non-irritated portions of the body is generally unaffected. Respiration and heart action are increased. Otherwise the animal is unaffected, and after a short time all abnormal symptoms disappear.

Irritation of the second variety causes constant reduction of several degrees in the temperature, both of the skin and in the rectum. Respiration and heart action are much accelerated; the animals lie exhausted, immovable, or make fruitless efforts to move the body. After—generally, from 6 to 8 hours—the temperature

rises, and with this rise of temperature, all morbid symptoms disappear. Sometimes, however, after a longer or shorter period, the temperature again sinks, accompanied by symptoms of collapse which may lead to the death of the animal.

After irritation of the third degree there is instantaneously a great loss of power, the temperature under the skin and in the rectum sinks considerably, power of motion is completely lost, skin sensibility lessened, reflex power destroyed, respiration diminished, heart action irregular and cessation of action in all the excretory organs. Then tonic and clonic convulsions occur, sometimes tetanus, and the animal lies in a half soporous condition and finally dies. The pathologico-anatomical changes are the same as after varnishing the body, and as these have been already described in a previous number of the "Archives" it is unnecessary to repeat them at present. All his experiments were made on rabbits whose organism has but little power of resistance, therefore, the morbid symptoms would appear sooner and have a more unfavorable termination than in the case of almost any other animal.

HEITZMANN (6) says that in cancer of the breast no connection can be demonstrated between the glandular epithelium and the newly formed epithelium occupying spaces in the connective tissue. He does not believe the new cells are migrated cells, as epithelium is not liable to migrate. The fact that in certain forms of cancer groups of epithelial elements are separated from each other by elastic fibres, is to him a proof that the cells had their origin from the connective tissue of the part. He thinks the whole amount of living matter within the basis substance is capable of producing cancer elements. The reporter thinks the whole subject requires a much more thorough investigation than it has as yet received, as nearly every writer upon the subject has a special view of his own as to the origin of the epithelial-like cells.

KROHN (7) says numberless nervous fibres ramify on the summit of the filiform papillæ and terminate in the epithelium which covers them. He finds that a very rich nervous plexus penetrates the superficial layer of the epithelium and there terminates; but not on the free surface, as maintained by Conheim.

LALANNE (8) has studied the duration of tactile sensation, and says that in none of the cases observed did it surpass 1–24th to 1–25th of a second. The minimum of duration varied with the individual and on the different parts of the body.

NORRIS (9) has used the following staining fluid for histological investigators, and thinks very highly of it:

RED STAINING FLUID.		BLUE STAINING FLUID.	
Carmine	ʒ ss.	Indigo-carmine	ʒ ii.
Borax	ʒ ii.	Borax	ʒ ii.
Distilled water	℥ iv.	Distilled water	℥ iv.

In each case the ingredients are thoroughly mixed by trituration in a mortar, and after standing the supernatant fluid should be poured off and preserved for use.

If the specimens have been hardened in chromate of potassa, picric acid or chromic acid, the sections should be thoroughly washed in water, then placed a few minutes in alcohol, and then from 15 to 20 minutes in a mixture of equal parts of the red and blue fluids, afterwards transferred, without washing, to a saturated solution of oxalic acid, and allowed to remain in it rather less time than in the staining fluid. When sufficiently bleached, the sections should be washed in water until the oxalic acid is completely removed. This treatment, he says, shows the different tissues of the body very distinctly. As regards the skin, the cells of the deep columnar layer of the epidermis have their nuclei reddish and their cell contents greenish, if there be pigment: bluish if none. The cells of the mucosa have more red in their nuclei and more blue in their cell contents, whilst the corneous layer usually colors greenish-blue or green. The external and middle layers of the hair follicles are purple, with the nuclei of their cells deep red. The cells of the external hair sheath are stained similarly to those of the corresponding layer of the surface epithelium. The cells of the sweat and sebaceous glands are very distinct, and their contents of a blue or greenish color, the nucleus reddish and the nucleolus sometimes blue.

RABL (10) says scrofula is a special, peculiar condition of the whole body or of only a portion of it, on account of which inflammations, with formation of a peculiar transitory tissue arise from the slighest irritation, which tissue has a great tendency to return. He found all forms of connective tissue elements in the scrofulous tissue. Also all the different forms of cell and nucleus division. Giant-cells were found in the majority of the preparations, and therefore they do not represent a specific tissue element of miliary tubercle, but only one of the modes of growth of diseased, growing, transitory tissue. The greater portion of the scrofulous granulation-tissue consists of large celled elements provided with more than one nucleus. These arise partly from lymph-cells, often from connective tissue-cells, and also from endothelium or free bone-cells. The bases of this tissue are therefore wandering cells. He believes all the expressions of scrofula from scrofulous eczema to scrofulous osteomyelitis depend upon the formation and the changes in a single form of tissue, viz.: the scrofulous granulation tissue.

SIMON (11) treated cases of favus in children with local applications of tincture of iodine. After a few applications iodine could be detected in the urine, and also a greater or less amount of albumen. These disappeared upon cessation of the applications. If the surface painted did not exceed in size that of a ten-cent piece, no albumen was found. Whether the same results would follow in the case of adults was not shown.

DISEASES OF THE GLANDS

BY ROBERT CAMPBELL, M.D.

1. **Chantry.**—Treatment of certain forms of acne. Archives Méd. Belges, April, 1876. (Lyon Méd., p. 246, June 18, 1876.)

2. **Ellinger.**—Treatment of acne with sand. Wien. Med. Woch., No. 45, 1876. (The Monthly Abstract of Medical Science, p. 122, March, 1877.)

3. **Hamilton, B. F.**—Treatment of sebaceous tumors by the injection of tincture of iodine. The Medical and Surgical Reporter, p. 148, Feb. 17, 1877.

4. **Herard.** — Molluscum. Transac. Soc., Méd. des Hôpit. La France Méd., p. 777, Nov. 29, 1876.

5. **Hillairet.**—Lotion for acne. L'Union Méd., p. 163, Jan. 30, 1877.

6. **Neumann, I.**—Treatment of acne rosacea. Allgem. Wein. Med. Zeit., No. 37, 1876. (London Med. Record, Dec. 15, 1876.)

7. **Rodet, M.**—Treatment of acne. La France Méd. and Canadian Jour. of Med. Sciences, p. 14, Jan., 1877.

8. **Wagner, C.**—Acne rosacea. Archives of Clinical Surgery, p. 21, July, 1876.

CHANTRY (1) has obtained good results in the more obstinate forms of acne rosacea from the following pills: ℞. Sulphuris Iodidi, 3 centigrammes (= gr. ½) ; Extracti Dulcamaræ, 12 centigrammes (= gr. ij), M. this for each pill first beginning with one pill and increasing two or three, as the stomach becomes accustomed to the drug. In addition he employs the following, locally, ℞ Tincturæ Benzoin, 4 grammes ; Potass. Sulphuret, 4 grammes ; Aquæ, 100 grammes ; M. Sig. Put a dessertspoonful in a glassful of tepid water. To be used morning and evening. If the iodide of sulphur produces gastralgia, it is to be discontinued for a few days.

ELLINGER (2) treated two cases of acne of the face in young persons, by means of white sand, and in twelve days the skin became clean and smooth, and remained so. In a case of acne rosacea affecting the chin and cheeks of a girl, the eruption disappeared after six weeks' friction. It is important that the grains of sand should be regular in size, free from lumps, and about as large as a half or whole poppy seed. Previous to the application of the sand, the affected parts should be washed with soap and water, and allowed to remain moist. In about half an hour after, some moistened sand should be rubbed into the parts affected for a short time, according to the tolerance and the necessity of the case. Any portion of the sand that remains should be brushed off.

HERARD (4) presented a child, ten years and a half old, affected with molluscum. These growths occupied all the posterior cervical region and extended downward to the lumbar region ; on the anterior surface of the chest there were some analogous products,

but about the size of a pea, while those on the neck were nearly as large as half an orange. The child was born with this heteromorphus production, which had insensibly increased. The child was in perfect health.

HILLAIRET (5) recommends the following lotion for acne, ℞. Sodæ Boratis, 15 grammes; Etheris sulph., 10 grammes; Aquæ, 250 grammes; M. Steam douches should also be employed.

NEUMANN (6) has obtained excellent results in persons affected with acne rosacea by brushing the skin affected with a solution of one part of carbolic acid in three or four parts of alcohol. The application has to be made every second day and leaves no cicatrices. It is not applicable to cases where there is much thickening or œdema.

9. **Berthold, A.**—Salicylic acid for local ephidrosis. Archiv. des Heilkund, Feb., 1876.

10. **Dunnot.**—To check colliquative sweating. Va. Med. Monthly (Med. and Surgical Reporter, July 1, 1876).

11. **Ebstein.**—Case of unilateral transpiration. Virchow's Archives (New York Med. Journal, p. 316, Sep., 1876.)

12. **Fothergill, J. Milner.**—Anhidrotics. The Practitioner, p. 409, Dec., 1876.

13. **Kuester, C.**—Salicylic acid for the profuse sweating of the feet. Deutsche Zeitschr. f. pract. Med.; Centralztg., No. 82, 1876. (Chicago. Med. Journal and Examiner, p. 1133, Dec., 1876.)

14. **Ortega.**—Treatment of fetid sweating of feet. Bull. de Thérap., p. 173, 1876. (The Practitioner p. 370, Nov., 1876.)

15. **Ringer and Bury.**—The effect of pilocarpine (the alkaloid of jaborandi) on two cases of unilateral sweating. The Practitioner, p. 401, Dec., 1876.

EBSTEIN (11) mentions the case of a man sixty years old suffering from angina pectoris, in whom the attacks at certain times were accompanied by transpiration of the left side of the head and neck, and the left upper extremity. There was no redness of these parts, nor dilatation of the pupil of the same side. In the intervals between the attacks of angina pectoris, the sweating took place whenever the patient became fatigued from muscular exercise. At the autopsy of the patient the cervical ganglia were examined with care, and presented nothing abnormal to the naked eye. On hardening small sections of the left ganglion in Müller's fluid and absolute alcohol, round, dark brown points could be distinguished, which under the microscope were recognized as vacuoles. These were lined by an endothelium, and contained blood-gobules: their form was usually round, seldom irregular, stellate; their continuity with dilated vessels could often be established, of which they constituted diverticula alternating with strictured points. The walls of these vacuoles were thickened, and contained, especially at their periphery, a large number of stellate nuclei. These ganglion-cells, which appeared empty, were markedly pigmented. Nothing was found in the ganglion of the right side. E. is disposed to trace these alterations to the vascular apparatus of the great sympathetic.

FOTHERGILL (12) speaks very highly of the remedial powers of atropine in the colliquative sweating of phthesis. He generally commences with 1-75 grain, in form of pill, gradually increasing to 1-25 grain, which latter dose can be given with perfect safety. If the liquid form is desired, from 20 to 35 minims of tincture of belladonna are given.

KUESTER (13) employs the following for profuse perspiration of the feet. ℞. Acidi Salicyl. ʒii; Talc. Prep. ℥ss: Amyl. ʒiiss; Saponis ʒi. M. The feet having been thoroughly washed and dried, the powder is dusted over them and between the toes, and some of it is put in the stockings. After two or three applications the bad odor disappeared; the secretion of sweat was considerably diminished in quantity; and in a short time the perspiration ceased entirely, and the result was a permanent cure.

ORTEGA (14) has obtained excellent results, in fetid sweating of the feet, from the local application of a solution containing one per cent. of hydrate of chloral. In the case which he mentions, the epidermis of the foot was white and macerated, and there were little ulcerations at the clefts of the toes and around the nails. The result of the application was to destroy the smell and heal up the ulcerations.

RINGER AND BURY (15) have given the results of some interesting experiments on the effects of pilocarpine, used hypodermically in cases of unilateral sweating. The first patient was a woman, aged 46, who had paraplegia ten years, and had been suffering from unilateral sweating of the left side for nine years; the least exertion causing profuse perspiration. Six hypodermic injections of pilocarpine were given; each of the injections contained one-third of a grain of the alkaloid, except the last, when one-half a grain was used. The first three injections and the fifth were introduced into the right arm, the fourth and sixth into the left arm. The first result of the injection in each case was a flushing of both sides of the face, and increased sweating, which gradually declined and ceased altogether in from fifteen to twenty-five minutes. The result of this case was that the patient was cured. In the other patient, a cabman, who had right hemiplegia with unilateral sweating of the same side, the pilocarpine only effected a temporary abatement of the symptoms, and the sweating was finally controlled by atropia.

INFLAMMATIONS; CHRONIC, SQUAMOUS, PRURIGINOUS AND PUSTULAR.

BY GEO. HENRY FOX, M. D.

1. **Broadbent.**—Treatment of psoriasis by means of phosphorus. Clinical Soc. Lancet, p. 859, Dec. 16, 1876.

2. **Cottle, Wyndham.**—The local treatment of psoriasis. Lancet, Sept. 30, 1876.

3. **Dowse, T. S.**—Treatment of lepra vulgaris or diffuse psoriasis. Practitioner, p. 356, Nov., 1876.

4. **Farmer, F.**—Alphos universalis. Brit. Med. Jour., Nov. 11, 1876.

5. **Herons, Geo. M.**—Internal administration of tar in psoriasis. Brit. Med. Jour., Dec. 16, 1876.

6. **Squire, B.**—Treatment of psoriasis by crysophanic acid. British Med. Journal, Dec. 23, 1876. (Med. Record, p. 104, Feb. 17, 1877.)

Broadbent (1), at a meeting of the Clinical Society of London, in speaking of the action of phosphorus in leucocythæmia, mentions having administered it in an obstinate case of psoriasis, in which ordinary remedies had failed, and in one week the patient got well.

Cottle (2) removes the thick scales of psoriasis and insures the absence of grease by wiping the parts with ether or alcohol. Then, after drying, he paints the affected patches thickly with a solution of india rubber, renewing the operation from time to time in order to maintain an impervious coating. He recommends this as a simple, comfortable, and efficacious mode of treatment.

Farmer (4) relates *one* case of general psoriasis treated by liquor potassæ internally, hot-air baths at night and an ointment of creosote and tar. Later he gave the liquor carbonis detergens internally, five minims in an ounce of quassia. He makes this one case public, as be "wished to give the tar treatment a full trial." F. apparently deems the trial of tar by those who have used it in scores of cases as unreliable or incomplete.

Herons (5) also cites *one* case in which the eruption of psoriasis disappeared during the summer after the patient had been nauseated and purged with liquid pitch in treacle in the spring. The writer claims that this certainly proves that the disease will disappear under the internal use of tar without any external application whatever. Now, when in summer and other seasons, thousands of cases of psoriasis get well apparently with no treatment whatever, and when the internal use of tar in psoriasis is not only highly esteemed by those who have tried it in more than one case, we cannot agree with H. that his case proves anything at all save the seductive nature of the *post hoc* argument.

Squire (6), learning that Goa powder had cured a case of ringed psoriasis as well as numerous cases of ringworm, determined to test its merit in the treatment of psoriasis. He used 3 ii. of chrysophanic acid (which he found to be the chief constituent of the powder) to the ounce of lard, forming an ointment of a light golden-yellow color. He gives two cases successfully treated with this ointment, which, being odorless, he considers preferable to the preparations of tar and at the same time more efficacious.

7. **Devergie.**—Psoriasis of the tongue. Univer. Méd., No. 153. (Med. Times and Gaz., Jan. 20, 1877.)

8. **Nedopil.**—On psoriasis of the mucous membrane of the tongue and mouth, and its relations to carcinoma. Archiv. für Klin. Chir., B. xx. 2. (Phil. Med. and Surg. Rep., Feb. 24, 1877.)

9. **Terrillon.**—Psoriasis and epithelium of the tongue. Gaz. Hebd., Nov. 3, 1876, p. 700.

10. **Trelat.**—Psoriasis of the tongue. Union Méd., No. 153, 1876. (Gaz. des Hôp., Jan. 27, 1877.)

Prof. Trelat (10), before the Society of Surgery, speaks of psoriasis of the tongue, and its tendency to assume a malignant form, requiring amputation.

Devergie (7) regards the affection as less grave. Regarding it as having no connection with ordinary psoriasis of the integument, he uses the term for it of white epithelial patches of the tongue. (At a recent meeting of the N. Y. Derm. Soc., the name "Alphelasma" was proposed.)

Devergie uses the following caustic:

Distilled water, ...	8 grammes.
Crystallized nitrate of mercury, ...	4 "
Acetic acid, ...	2 "

11. **Aillaud, F.**—A study of some forms of simple inflammation of the skin, described under the names of pityriasis, &c. Paris, J. B. Baillière et fils, 1876.

12. **Locherer.**—Case of congenital icthyosis. Ærtzlicher Intelligenz bl., July 11, 1876. (Monthly abstract of Med. Science, Dec., 1876, p. 559.

13. **Ory, E.**—Treatment of impetigo. La France Méd., Jan. 31, 1877, p. 69.

14. **Stark, G. A.**—Case of sycosis treated by carbolic acid and Canada balsam. Canada Med. and Surgical Journal, Sept., 1876, p. 97. (Braithwaite's Retrospect, Jan., 1877, p. 205.)

15. **Will, J. O.**—Use of salicylic ointment in eczema. Med. Press and Circ., June 21, 1876.

NEW FORMATIONS.

BY EDWARD WIGGLESWORTH, M. D.

1. **Fox, T. and Farquhar,** T.—On certain skin and other diseases of India and hot climates generally. J. Churchill, London, 1876.

2. **Ory, E.**—Ueber molluscum pendulum. Le Progrès Méd., No. 17, 1866. (Allg. Med. Centr. Z'g., Aug. 16, 1876.)

Fox and Farquhar (1) give, in the shape of a governmental report, a summary of information received from physicians in various tropical countries in regard to diseases of the skin there prevalent. The compilation contains valuable matter in reference to fibroma, elephantiasis, ainhum, morphœa, leprosy, cheloid, etc.

Ory (2) showed to the Anatomical Society of Paris a case of "molluscum pendulum" (?). The description is not clear, and the writer labors merely to distinguish the lesion from spontaneous cheloid, which he does very simply by enumerating at length every mark, trait and symptom in his case, and showing their complete diversity in all respects from any of the characteristics of cheloid, and then naïvely stating that "by these means the differential diagnosis can easily be made." As well might he diagnose a human being as an anthropoid and proceed to show how this differs from a rail fence.

3. **Bergmann, E.**—Angeiomata cavernosa. Schmidt's Jahrb. Bd. 171, No. 9, 1876, p. 283.

4. **Campana, R.**—Clinical studies upon mother-marks. Giorn. Ital. d. Mal. Ven. e. d. Pelle., Ottobre, 1876.

5. **Gamberini.**—Vascular nævi cured by the use of the dermal curette. Giornal. Ital. d. Mal. Ven. e. d. Pelle, Oct., 1876.

6. **Hammond, W. A.**—On the successful treatment of vascular tumors by injection with the fluid extract of ergot. Archives of Clin. Surg., N. Y., Oct., 1876.

7. **Hulke, J. W.**—Case of general telangiectasis, most developed in the left half of the body, associated with abnormalities, etc., etc. Royal Med. and Chir. Soc. Lancet, Dec. 16, 1876.

8. **Legg, W.**—A case of hæmophilia complicated with multiple nævi. Royal Med. and Chir. Soc. Lancet, Dec. 16, 1876.

11. **Warren, J. C.**—Cavernous angioma of lip. Mass. Gen. Hosp. Reports. Boston Med. and Surg. Jour., Oct. 26, 1876.

12. **Weil, C.**—Beiträge zur kenntniss der angiome, mit tafel. Viertelj. f. d. Praktische Heilkunde, Vol. I., 1877.

Bergmann (3) reports two cases of cavernous tumors cured by the actual cautery. The patient was etherized; the growths, compressed by means of Von Langenbeck's clamping forceps and surrounded for protection by compresses wet continually with ice water, were then burnt with a red hot iron till nothing remained but the charred isthmus in the gripe of the clamp. Lister's dressing was applied.

Hammond (6) treated three cases of angiomata by subcutaneous injection of fluid extract of ergot in half-drachm to two-drachm doses. Three to four injections at intervals of about ten days seemed to suffice for the cure. Two of the nævi were venous, one arterial. No inflammation or tenderness resulted, and the writer attributes the good results to the action of ergot on the organic muscular fibres of the vessels. Further experience must be awaited as to the permanent value of this mode of treatment.

Warren (11) operated by means of galvano-cautery upon a cavernous angioma of two years' duration upon the upper lip of a child aged five years. [The growth had been once previously operated upon by acu-pressure.] No pain or hæmorrhage. Ten days afterwards, hæmorrhage occurring, the growth was tied by double ligatures. A week later a granulating mass appeared and was tied

us before. In another ten days the ligatures came away, and after ten days more the little patient was discharged cured, with little or no deformity of the lip.

13. **Colomiatti, V. F.**—On the nature and structure of lupus vulgaris. Dall'. Istit. Anat-path. di Torino. Torino, 1875, pp. 42, 8°. 1 Tavola. (Centr'bl. f. d. Med. Wissensch., No. 30, Juli, 1876.

14. **Ferreol.**—Tuberculosis linguæ. Gaz. des Hôp., July 18, 1876.

15. **Figuet, A.**—Lupus of the vulvo-anal region. Thèse de Paris, 1876. Rev. des Sci. Méd. T., viii., 2.

16. **Piffard, H. G.**—On the treatment of the scrofulides. (Lupus.) Braithwaite's Retrospect, LXXIII. July, 1876.

17. **Squire, B.**—Five cases of lupus vulgaris treated by a modification of the method of Volkmann. Med. Times and Gaz., Aug., 1876.

18. **Stern, J.**—Contribution to acute lupus erythematosus. Wien. Med. Wochensch., No. 38. Sept. 16, 1876.

19. **Weigert, [Breslau.]**—Tuberculosis vaginæ. Virchow's Arch. 67 Bd. II. Heft. (Allg. Wien. Med. Z'g., No. 30. July 25, 1876.

Colomiatti (13), after examining histologically eleven cases of lupus, concurs with Hebra and Neumann in regarding the formerly separated forms, nodosus, hypertrophicus, exfolians, exulcerans. serpiginosus, etc., as merely varying manifestations or progressive stages of one and the same pathological process. He distinguishes, however, from true lupus, pseudo-lupus, a form of tuberculosis of the skin. Under pseudo-lupus he places also certain forms etiologically due to syphilis or scrofula.

Figuet (15) bases an interesting monograph upon an analysis of twelve cases, for the most part unpublished, of lupus of the vulva. He regards "esthiomène" as lupus, and lupus as "scrofula;" considers it a disease of the lower classes, attributes the localization in these cases upon the genitals, to dirt, unhygienic circumfusa and excesses in venery, and holds that it is of exceptional occurrence after the age of forty-five years. The subject is treated under three divisions,—the superficially ulcerating form, that ulcerating deeply, and that characterized by hypertrophy with or without ulceration. Lupus of the vulvæ, according to the writer, rarely occurs as a primary lesion, but is developed upon a scrofulous soil, its first manifestation being leucorrhœa, with itching and œdema, the lymphatic glands of the groin rarely swelling, though there is no doubt as to the participation in the process of the lymphatic vessels. The course is one of slow progression, prognosis unfavorable. Etiologically there is no specific cause. Pathologically the disease is a hypertrophy of the skin with formation of "yellow nodules," and infiltration of embryonic elements. The treatment is by iodide of iron, cod liver oil and sulphur baths. The writer hardly draws a sufficiently marked line between "esthiomène" and elephantiasis.

SQUIRE (17), instead of puncturing, as suggested by Volkmann, scarifies the skin in lupus with regular parallel linear incisions about one-sixteenth of an inch apart. Each successive series of scarifications cuts the former one at an acute angle. He uses a cataract needle with a head four times the usual size. The skin is first of all frozen, preventing subsequent bleeding, and blotting paper applied to the incisions at the last. Five cases thus treated, and reported by him, did well.

STERN (18) gives at length a detailed account of a case of acute lupus erythematosus, supporting, and even extending, the clinical description recently published by Kaposi, and important as it was novel, since it showed a form of the disease potentially fatal. Stern's case was a woman of twenty-one years. Both parents died of phthisis, and four of their children died early. The patient was strumous, anæmic, and suffered from complete amenorrhœa. The attacks of lupus were successive, the face not at first affected, although subsequently the disease invaded it also. There was pericarditis, and pain, and swelling, especially of the joints. No erysipelas. During two months of treatment there was parallel and equal improvement in both the local lesions and the general symptoms, and the patient was at the end of this time permitted to leave the hospital, convalescent.

20. **Fox, T.**—Clinical lecture on tubercular leprosy. Med. Times and Gaz., Sept. 2, 1876.

21. **Munro.**—Etiology and history of leprosy. Edinb. Med. Jour., Sept., 1876.

FOX (20) describes a typical case of leprosy at present in the University College Hospital, the patient coming to London from Barbadoes, where he had lived all his life. The appearances upon the skin were:—first, discolorations, then, tubercular formations or infiltrations, with, finally, anæsthesia. A brother was also reported affected by the disease, and Fox considers leprosy in the majority of cases hereditary. The neoplastic infiltration was most marked about the face. Palate, pharynx and larynx were also affected. The ulnar nerves could be detected as large cords behind the elbows, and anæsthesia was most marked in the parts supplied by these nerves. The muscles of the hands were wasted. The disease is incurable, though the tubercles may be absorbed under friction with gurjun balsam or castor oil and carbolic acid. Large doses of quinine appear to be beneficial.

MUNRO (21), from a residence in various tropical countries and careful study of the there existent leprosy, denies Dr. Bakewell's assertion that this disease is communicable by vaccination. In St. Kitts, W. I., there has been, under vaccination, a relative and absolute decrease in the number of lepers since 1817. The remainder of the paper is a valuable contribution to the etiology and history of leprosy.

22. **Bell, J.**—Paraffin epithelioma of the scrotum. Edinb. Med. Jour., p. 135. Aug., 1876. (Rev. des Sci. Méd. I., viii., 2°. Fasic.)

23. **Duhring, L. A.**—Epithelioma of the face. Phila. Med. Times, Dec. 9, 1875.

24. **Thin, G.**—On some of the histological changes in epithelioma. Lancet, vol. 1, No. 14, 1876, p. 496. (Allg. Med. Centr. Z'g., Aug. 30, 1876.)

25. **Warren, J. C.**—"Noli me tangere" (epithelioma). Mass. Gen. Hosp. Reports. Boston Med. and Surg. Jour., October 26, 1876.

26. **Wernher.**—Papilloma and epithelioma of the sole of the foot. Deutsche Zeitschr. für Chir., VI., 6, p. 519. 1876. (Schmidt's Jahrb., Bd. 171. 1876, No. 8, Sept. 20, 1876.)

BELL (22) gives two cases of "chimney-sweeps' cancer," a form, local, arising where soot stains on the rugæ of the pendulous scrotum have long been present, and specific, resulting from the contact of soot from coal (not from wood) and from English rather than Scotch coal. Brushes have now supplanted boys, and soot as a *fons et origo*, is being succeeded by the fumes and oil of paraffin in shale works, the source of the evil in the cases reported. The patients suffered also from comedones, acne, and eczema. The growths were removed by excision, and the patients, in two and three weeks respectively, discharged as cured.

DUHRING (23), in a clinical lecture reported by Van Harlingen, furnishes a clear and concise description of two cases of epithelioma of the face, the former one of the superficial, the latter of the deep-seated or infiltrating variety. The differential diagnosis between epithelioma, syphilis and lupus is ably drawn, and a treatment by caustic, electrolysis or the knife recommended.

THIN (24) read an excellent paper before the Royal Med. and Chirurg. Soc. of London, showing that the epithelial growth in cancer of the skin is constituted by an extension of the epithelium which normally forms the rete malpighii, the sweat glands and the sebaceous follicles, and does not take its origin exclusively in the lymphatic vessels, as alleged by Köster and Rajewski. As new epithelial cells form, those in the centre of the epithelial masses or on the outer surface of the rete undergo degeneration; horny, where the cells elongate, flatten and become horny, like membrane, and colloid, where they swell and acquire an even glassy appearance. Thin's preparations were from cancers of the lip in females. Sections of the tumors had been put fresh in solution of osmic acid. The author regards this mode of preparation as presenting advantages over any other method at present known to us.

WARREN (25), under the title "Noli me tongere," reports a case of rodent ulcer upon a man of sixty years of age. A small wart appeared one year previously over the right malar bone, increasing in three months to the size of a silver half dollar. The patient then consulted various quacks, the disease growing always worse, until a deep and ragged ulcer two and a half inches in diameter occupied the inner portion of the right orbit and the parts adjacent. Edges at present red, indurated and ragged, and the surface covered with cheesy foul-smelling pus. Glands over right condyle of jaw swol-

len and sensitive. Patient very cachetic. About a week after entering the hospital, he was suddenly seized with a series of chills, followed by wild delirum, and died the following day. The autopsy, by Dr. R. H. Fitz, showed that the disease had extended through the right orbital plate into the pituitary fossa, the dura forming part of the base of the ulcer and showing recent false membrane on its inner surface. Brain substance showed nothing unusual. The disease was a large cell epithelioma changed by irritation from the small cell to the more malignant form as noticed by Billroth.

WERNHER (26) describes two cases of epithelioma of the sole of the foot. There have been recorded previously one case by Schoemaker [Arch. f. Klin. Chir. XVI., Jahrb. CLXV., p. 164], and a short communication by Volkmann on "cancroid of the sole," in the Jahresbericht for 1868, *apropos* of a review of a work by Lucain. Wernher's cases were men past middle life. In one the knife was employed, in the other caustic potash. Both cases recovered. Pathologically the lesion consists of hypertrophied and branched papillæ, covered by thickened epidermis. After years (54 in one case) of quiescence, ulceration sets in and the tumor takes on the malign or epitheliomatous condition. Operative interference is, therefore, called for at an early stage.

27. **Schultz, R.**—Beiträge zur Lehre vom "Panzerkrebs." Arch. d. Heilkunde. Aug. 1, 1876.

SCHULTZ (27) gives four cases of the form of cancer, treated of by Velpeau [Traité des maladies du sein et du Region mammaire. Paris, 1854], under the title "Squirrhe en cuirasse ou tegumentaire." Carefully examined with the microscope they showed an equable distribution of epithelial cancer cells in the interstices between the connective tissue fibrillæ and bundles. The cells were in one or two rows between the fibrillæ, with very small alveoles. Schultz considers that from deep-seated cancer nodules, cancer-cells invade the skin by the way of the lymph vessels, then spread in the interstices of the connective tissue fibrils, and, permeating the skin in all directions, cause the "breastplate" condition giving a name to this form of cancer.

28. **Chiari.**—Demonstration eines Falles von multipler Gesch wulstbildung [Sarcoma]. K.K. Gesellschaft d. Aerzte in Wien. Wien. Med. Presse, Dec. 24, 1876.

29. **Satterthwaite, T. E.**—Sarcoma of the skin in some respects resembling keloid. Trans. N. Y. Path. Soc., June 26, 1876. N. Y. Med. Record, Sept. 16, 1876.

30. **Von Winiwarter, A.**—Plexiform fibroneuromata of the nerves of the arm, with circumscribed hypertrophy of the skin and sarcomatous development. Arch. f. Klin. Chir. XIX., p. 595. (Arch. Gen. de. Méd., Jan., 1877, p. 104. Centralb. f. d. Med. Wissenschaften, No. 47, Nov. 18, 1876.)

CHIARI (28) showed preparations from sarcomatous tumors occurring upon a man in Von Sigmund's clinic. These began upon the extremities; some had lasted three years, gradually enlarging, others disappearing during this period. The tumors varied in size

from a hazel-nut to a man's fist ; some felt hard, others soft ; some were subcutaneous, others in the skin. The lymph-glands were generally swollen. Iodide of potassium produced slight shrinking of the tumors. Gangrene occurred in two of them. Death took place under anæmic symptoms. Before the autopsy the tumors were regarded as gummata. Autopsy, general anæmia and marasmus ; some dysenteric follicular ulceration ; groups of nodules in the skin and muscles, and single ones in the lymph-glands and left lung. These nodules were round, hard, dark red on section, and, in some places, fattily degenerated. The microscope showed them to be sarcoma. Chiari regards them as of primary origin in the muscles.

Satterthwaite's case (29) was of a man aged 43 years. A wart upon the neck fifteen years previously had been tied off, but grew again. It was then rubbed off by his clothes and grew again as large as a hazel-nut ; was again tied off, and, growing for the fourth time, was finally cut off by a surgeon. The wound healed, a bluish nodule came beneath the scar, and the tumor a fifth time reappeared. It was again removed, but now several growths presented themselves upon different parts of the body, bleeding when chafed by the clothes, the patient's health otherwise being good. The original tumor became fungous, lobular and pedunculate, with elevated ridges, as large as a finger, running off from it in three directions. It was regarded by some of those who saw it as a keloid undergoing degeneration, but the microscope showed that the tissue composing the ridges was entirely made up of fusiform elements, and not the fine, wavy and tenaceous connective tissue of keloid.

Von Winiwarter (30) relates that a Pole, aged 36, had, at three years of age, upon the inner side of his left upper arm a small nodule. A year ago a rapidly growing new formation appeared upon the left shoulder and was excised. It returned, and coincidently the original nodule began to increase in size till the whole shoulder and outer half of the upper arm, with the whole bicipital region, were the seat of a great tumor following the course of the nerves and vessels. Smaller tumors appeared upon the forearm and abdomen. Part of the large tumor was removed, and the patient died of gangrene. The nervus radialis and cutaneus brachii externus were lost in the tumor, the other nerves of the arm being only quadrupled in size. The microscope showed two distinct processes, the former a slow and gradually increasing nerve thickening, due to growth of connective tissue and nerve-cells, the latter true sarcoma formation in the great tumors, the two being perfectly independent of each other.

31. **Cartaz, A.**—Study on plexiform neuromata. Arch. Gén. de Méd., Aout., 1876.

Cartaz (31) gives a full account of plexiform neuroma in a paper of 27 pages, accompanied by 13 cases. This name was first given to the affection by Verneuil. A case occurred in Giraldés wards at the hospital for children. Robin, in 1854, presented a specimen to the Biological Society of Paris (vide Bulletins), Depaul

one in 1857 to the Anatomical Society (see Bulletin), and in 1859 Guersant one to the Society of Surgery (Bulletin). In 1861 Verneuil published a detailed study of this lesion in the Arch. de Méd. His pupil, Margerin, took this subject for his inaugural thesis, and added three unpublished cases. In 1870 Christot of Lyons, published two cases in the Gaz. Hebdom. In 1874 Czerny recorded a case in Langenbeck's Archives. Since then, another has been published by Winiwarter (Langenbeck's Archives for Clin. Surgery, 1876, p. 594). Excepting the cases of Duhring, Kozinski, Billroth, Follin, Jœssel, Mott, Virchow and Lotzbeck, Cartaz' paper affords a very complete bibliography upon neuroma in general.

HEMORRHAGES AND NEUROSES.

BY ARTHUR VAN HARLINGEN, M. D.

1. **Appenrodt, J.**—Two cases of morbus maculosus Werlhoffii occurring during the first year of life. Deutsche Med. Wochens. 1876, No. 39. (Abstract in Centralbl. f. Med., 1876, p. 944.)

2. **Barlow, T.**—Sporadic hæmophilia. Med. Times and Gaz., 1876. Vol. 2, p. 591.

3. **Bulkley, L. D.**—On the use of ergot in the treatment of purpura. Practitioner, November, 1876, p. 321.

4. **Couty.**—Study of a species of purpura of nervous origin. Gaz. Hebdom., 1876, Nos. 36, 38, 39 and 40. (Abstract in Centralbl. f. Med., 1876, No. 45.)

5. **Couty.**—A case of purpura. (Soc. Biolog.) Gaz. Hebdom., July, 1876, p. 424.

6. **Jenner, Sir Wm.**—A case of hæmophilia, with remarks. (Clin. Soc.) Lancet, 1876, p. 716. Editorial remarks on the above. Id. p. 727.

7. **Legg, W.**—A case of hæmophilia with multiple nævi. (Med. Chir. Soc.) Lancet, 1876, p. 856.

8. **Legg, W.**—A case of purpura, with post-mortem appearances. St. Barthol. Hosp. Reports, 1875, p. 63.

9. **Lereboullet.**—Purpura hemorrhagica and petechial affections. Gaz. Hebdom., 1876, No. 36.

10. **Mistarlet.**—Cases of purpura in infants. Thèse. de Paris, 1876.

11. **Monod, Eug.**—Purpura hæmorrhagica symptomatic of cirrhosis. Case with post-mortem examination. (Soc. Anat.) Le Progres Méd., 1876, p. 800.

12. **Taylor, W. J.**—A case of peliosis rheumatica. Am. Practitioner, Dec. 1876, p. 333.

13. **Tyrrell.**—Neurotic purpura. Pacific Med. and Surg. Jour., 1876, June.

14.—Purpura hemorrhagica. "The Doctor," 1876, August 1.

15.—La stigmatisée de Bahia. Le Mouvement Méd., 1877, No. 1.

16.—An Italian Louise Lateau. "Correspondence" Lancet, 1876, v. 1, p. 557.

BARLOW's case (2) was that of a man 29 years of age, who applied for relief on account of hæmaturia. He presented a few ecchymotic maculæ under the skin, and stated that he bruised easily. No history of hæmorrhagic diathesis. The case was not followed, and the one point of interest in connection with it is the appearance of bloody urine, an unusual symptom.

BULKLEY (3), impressed with the inefficiency of the treatment ordinarily employed in purpura, calls attention to the use of ergot, which, although suggested some years since, has not yet found its way into the text-books or into general use. B. gives three cases in which this treatment was of marked service, after other methods had failed, and describes briefly the modus operandi of the drug. The distinction is drawn between purpura on the one hand and scorbutus and hæmophilia on the other; ergot being of undoubted use in the former disease, while little can be expected of it, as a general thing, in the latter. The following is an abstract of the conclusions reached by the author:—

The treatment of purpura as advised in the books is ineffective and tedious in lighter cases, and insufficient to save life in many of the severe or hæmorrhagic cases. Ergot possesses a very decided power in contracting the involuntary muscular fibres, and has been proved a valuable arrester of hæmorrhage in many affections. In purpura, when given in sufficient doses, it causes almost immediate cessation of the cutaneous and other hemorrhages. It is best given hypodermically, as the stomach is frequently not in a condition to tolerate it. Ergotin is uncertain, and, after dilution with water, often becomes inert. The fluid extract is the best form; it may be injected undiluted, and, if care be taken, no abscesses follow. The best locality for injection is about the pectoral muscles or sides of the chest, half way down. Severe cases of purpura require the frequent repetition even of very large doses, which may be given hypodermically and by the mouth at the same time. Generally 1 to 2 grains ergotin or 10 to 15 minims of the fluid extract hypodermically twice a day are sufficient, but the former may safely be increased to 5 grains and the latter to 20–30 minims, and repeated every hour and a half. No fear need be entertained of any untoward effects; an ounce of fluid extract by the mouth, and seven grains of ergotin hypodermically, have failed to give rise to any unpleasant symptoms; and from half a drachm to a drachm and a half of the tincture or fluid extract have been continued for several months without producing ergotism. (It is not understood that Dr. Bulkley advises the administration of ounce doses of the fluid extract: his own maximum is a drachm repeated, but he states that others have given an ounce at once without detriment.—REP.) Other preparations of ergot may be employed internally,—as the powder, solid extract, wine—or infusion, the dose being proportioned to the effect required and produced.

Couty (4) has observed a case of purpura in which the peculiar group of symptoms to which Henoch first drew attention, purpura, in connection with articular and intestinal disturbance, were noted. Together with his own case, C. has collated twelve others. The common characteristic of all these cases is the sudden appearance and irregular course of the eruption. Vomiting of billious matters accompanied by colic is observed; the abdomen is sensitive, the stools rather frequent than diarrhœic. The attacks come on suddenly and pass off again in a few hours. Œdema of the skin is noticed about the joints and elsewhere; less frequently involving the extremities or generally diffused. The joint swelling is painful without causing entire immobility. This symptom also is remarkable for its sudden appearance and various changes of locality. Either of the three symptoms, purpura, œdema or intestinal disturbance may appear first.

The various symptoms bear no fixed relation of intensity to each other or to the collective affection. Couty distinguishes four varieties of purpura:—1. When the eruption appears alone; 2. When it is accompanied only by œdema; 3. When accompanied only by gastro-intestinal disturbance; 4. When both œdema and gastro-intestinal disturbance occur in connection with the purpura. Many cases described as peliosis (purpura) rhumatica belong, not to the rheumatic process but to the second category. The various forms of purpura described by Biett, Willan, and others, may be included under two classes, *purpura hemorrhagia primitiva* (morbus maculosus Werlhoffii), and *purpura cachectica*, to which purpura senilis belongs.

The peculiar anatomical lesions of these forms of purpura are as yet almost unknown. Wilson Fox observed in a case of purpaur dependent upon syphilis, amyloid degeneration of the cutaneous vessels. Ollivier and Ranvier found in leukæmic purpura, collections of white blood corpuscles in the vessels.

In morbus maculosus Werlhoffii, and also in secondary purpura, œdema and gastro-intestinal disturbances are wanting; not only is the skin involved, but there are found, particularly in the former, from the beginning, marked changes in the mucous membrane, kidneys, lungs, etc., which may lead to fatal hemorrhages. The cutaneous hemorrhages are also different in these forms of purpura from that under consideration. In morbus maculosus and in purpura cachectica the hemorrhages appear gradually, while in the affection under consideration the hemorrhages are sudden. In the former the disease attacks the weak and debilitated, while in the latter it attacks the strong and well-nourished, only rarely becoming chronic and threatening. Nervous purpura is also to be carefully distinguished from scorbutus. The urine shows slight and inconstant changes, not sufficient to account for the œdema. Since also the other organs and the blood give no explanation of the symptoms, we arrive at the nervous origin of the disease by exclusion, and Couty regards this form of purpura as nervous. The irregular development of the affection, its variety of appearance and the slight influ-

ence exerted by it upon the general well-being of the individual all favor this view. No symptoms appearing which may be referred to a cerebral or medullary origin, the sympathetic system is to be regarded as chiefly involved. In fact, Couty has observed an interchange of the disturbances under consideration with other well-known vaso-motor derangements. Thus, the attacks of colic are similar to those "gastric crises" present in ataxia, and saturnine colic, which latter Vulpian regards as a vaso-motor neurosis dependent upon the influence of lead upon the solar plexus. Œdema is also observed in ataxia and saturnine poisoning, as well as in various other nervous disturbances. Couty, in conclusion, compares the purpura itself to the neuropathic hæmatidroses described by Parrot.

Wickham Legg (8) reports the following case with the result of post-mortem examination: A man 21 years of age and of previous good health, was attacked by rigors, palpitation of the heart, and loss of flesh. There was at first no vomiting or pain after food. No abnormal lung sounds. Heart-beat at apex diffused and ill-defined. Systolic murmur at apex and base. Spleen and liver slightly enlarged. Some cough and occasionally expectoration of dark lumps of blood, which was particularly troublesome at night. Later the appetite failed; thirst was morbid; food vomited immediately after eating, upon exertion; bowels regular, stools dark and liquid. Numerous small red maculæ could be seen about left knee, unconnected with hair-follicles. Bruised easily on slight pinching. The patient soon began to get worse, bleeding from the gums, succeeded by epistaxis occurred, followed by headache, delirium and death.

At the post-mortem examination the body was quite blanched, showed several ecchymosis on the right shoulder. The membrane lining the lateral ventricles of the brain was studded with ecchymosis, and these were particularly abundant in the choroid plexuses, velum interpositum, soft commisure, corpora striata, optic thalami and posterior horn of ventricle. The membranes of the cerebrum and convolutions, together with the gray and white matter, showed scarcely any hæmorrhages, the central part of the brain around the ventricles alone showing these. The corpora striata, optic thalami and pons showed an abundance of minute hæmorrhages, and these were most numerous of all in the meninges of the posterior lobe of the brain covering the cerebellum and in the cerebellum itself. These hæmorrhages were apparently limited to the meninges and were not seen in the central parts of the cerebellum. The vessels of the brain appeared to the naked eye quite normal. Thymus gland persistent. Bloody fluid in pleura and pericardium, the latter containing many ecchymoses on its visceral, none on its parietal aspect. Foramen ovale patent which could admit the top of the little finger. Lungs natural, no hæmorrhage in pleura or bronchi. Liver pale and flabby. Spleen small. Ecchymoses in pelvis of kidney. Small ecchymoses in stomach; small intestine highly pigmented. Large intestine showed two or three scars of old ulcers, and contained altered blood. The aorta was natural.

A case (15) similar to that of Louise Lateau, so widely known

has recently been reported as occurring at Bahia. The woman, who is 32 years of age, has been subject to "nervous crises" since the age of 7, but these have been more decidedly hysterical since the period of puberty. During the occurrence of one of these crises the patient experiences a burning sensation in the skin at certain points; subsequently the skin becomes slightly reddened, the epidermis scales off in fragments of extreme tenuity, and serum oozes out drop by drop from the skin, mixed with a little blood: occasionally the serum seems to exude in one sheet as if from a blister. The next day the surface is dry and covered with a thin crust: this falls off at the end of ten days, leaving a red surface. No eruption of vesicles or bullæ precedes the serous exudation. The appearance is as if the skin had been rubbed with some hard substance until abrasion had taken place. No febrile reaction can be observed unless a number of the stigmata appear in the same region.

At first these patches used to appear only on the legs: later they made their appearance on the arms: at present they come out on all parts of the body, excepting the palms and soles. They even appear on the palpebral conjunctiva, whence the patient was said to have shed tears of blood. The gastric mucous membrane, in all probability, partakes of the same influence, since blood is vomited at times.

One of the most singular symptoms in the case is the rigid symmetry of the eruption. No matter how extraordinary the form taken by the patches, both sides of the body show precisely the same shape and size.

The patient belongs to the lower class. She is not extremely nervous, and displays none of those ecstacies, etc., observed in the case of Louise Lateau.

17. **Armaingaud.**—On a vaso-motor neurosis attending hysteria: cure by intermittent currents of electricity. Gaz. Hebdomadaire, Nos. 33 and 35. 1876.

18. **Hutchinson, J.**—Corymbiform arrangement of eruptions as indicative of nerve-causation. Brit. Med. Jour. Med. and Surg. Reporter, 1876, July 29.

19. **Kaposi. M.**—On neuroses of the skin. Vierteljahrsschr. f. Dermatologie u. Syph., 1876, p. 365.

20. **Pick, Ph. J.**—Relation of diabetes to skin diseases, pruritus, furunculosis, etc. Med. Chir. Centralblat, 1876, No. 34.

21. **Senal.**—On general sensibility, and its alterations in melancholic affections. A. Delahaye & Cie., Paris, 1876.

22. **Zenker.**—Two cases of vaso-motor neurosis. Berlin Klin. Wochenschr., 1876, No. 34, p. 489.

KAPOSI's paper (19) is simply a transcription of the chapter on neuroses of the skin, written by him for Hebra's great work. After a few general remarks on the varieties of disordered sensibility, the author goes on to describe the various forms of pruritus cutaneus. He takes occasion to allude to the confusion formerly existing among practitioners regarding the exact meaning of the terms *prurigo* and *pruritus*, and follows this by a definition of pruritus. He then continues, describing the affection under two heads, p.

universalis and p. localis. Among the various forms of the latter variety, pruritus of the sexual organs, arms, palms and soles, are separately dealt with. Pruritus hiemalis is recognized as a distinct form of the disease, cold, however, being regarded by Kaposi as only a remote cause of the affection, which he attributes rather to a certain dryness, such as that produced by washing with soap, etc. It is probable that pruritus hiemalis is not as frequently observed in Germany as in this country, as the author does not seem personally familiar with all its symptoms. Treatment, as is usual with the Germans, occupies a subordinate place, and nothing new is offered.

PARASITIC DISEASES.

BY HENRY G. PIFFARD, M. D.

I. Vegetable.

1. **Squire.**—Chrysophanic acid ointment. The Pharmaceutical Journal, Dec. 16, 1876.
2. **Crocker.**—Goa or araroba powder in ringworm. Lancet, Jan. 27, 1867.
3. **Boulton.**—Treatment of ringworm by goa powder. British Med. Journal, Feb. 3, 1877.
4. **Bennett.**—Treatment of ringworm by goa powder. British Med. Journal, Feb. 10, 1877.
5. **Squire.**—On goa powder as a remedy in skin diseases. Med. Times and Gazette, Feb. 10, 1877.
6. **Squire.**—Chrysophanic acid as a remedy in skin diseases. Feb. 17, 1877.
7. **Postaus.**—Chrysophanic acid. British Med. Journal. Feb. 24, 1877.

Since the appearance of Fox's "Skin Diseases of India," a great deal of interest has been excited concerning the asserted efficacy of goa powder as a remedy for certain of the parasitic affections of the skin, especially those due to the presence of the *trichophyton tonsuraus*, and during the past few months the English journals have been flooded with communications upon the subject, a few of which are noted above.

Goa powder is a vegetable substance, and the product of some unknown plant. Its commercial source is Bahia, Brazil, where it is known by the name of araroba. Its chief ingredient is chrysophanic acid, and it is to this agent that its active properties are supposed to be due.

SQUIRE (1) prepares an ointment by dissolving two drachms of chrysophanic acid and an ounce of lard in the smallest quantity of boiling benzole over a water bath. After the solution is affected the mixture is allowed to cool, and it must be briskly stirred until quite cold.

CROCKER (2) used a saturated solution of chrysophanic acid in benzole which retains ten grains to the ounce when cold. He cured cases of tinea circinata with six applications, other cases were treated with an ointment composed of chrysophanic acid, 20 grains; acetic acid, 20 minims; simple ointment, one ounce; subsequently he used goa powder instead of the chrysophanic acid in the same proportion. He obtained the following results: Of nine cases of tinea circinata, all were cured in a week or ten days. Of twenty cases of tinea tonsurans, two were cured, one of them in six weeks, the other in two months. In seven cases there was notable improvement. In eleven cases there was little improvement, even (in some cases) at the end of three months. He cured a case of chloasma with two applications.

BOULTON (3) says that he has used goa powder in ringworm with the very best results, and considers it a specific.

BENNETT (4), speaking of ringworm, says that this disease which is so common in India and China that almost every individual is affected, is successfully treated with several external applications, such as tincture of iodine, solutions of mercury, &c., but that goa powder in his hands has proved the most certain and rapid. In acute cases he found that one application was usually followed by recovery.

SQUIRE (3) details the chemistry of goa powder, and states that its price in London is one shilling and sixpence * per ounce, and (6) recommends that 20 grains of the acid be dissolved in an ounce of hot lard.

POSTAUS (7) says that two drachms of chrysophanic acid will dissolve in an ounce of hot lard, which should be transferred to a mortar and rubbed down till cold. The ointment may then be scented with two drops of otto of rose.

The present reporter procured, in May last, some goa powder and extracted from it with ether a small quantity of impure chrysophanic acid. This was thoroughly rubbed up with glycerine and applied in two cases of phytosis versicolor, and one case of trichophytosis corporis (tinea circinata), with surprisingly prompt results. Subsequently a saturated alcoholic tincture of goa was employed thoroughly conjoined with epilation in a case of extensive trichophytosis capitis without benefit. Later Mr. Charles Rice, chemist to Bellevue Hospital, obtained for me some pure chrysophanic acid. Mr. Rice, however, was unable to extract more than 25 per cent. of acid from the sample of goa which I furnished him, while some of the English chemists obtained as much as 80 per cent. This renders it probable that some samples of the powder may be adulterated, its high price being sufficient temptation.

8. **Foulis.**—Treatment of ringworm by leaves of Cassia Lata. British Med. Journal, Jan. 10, 1877.

9. **Fox.**—Treatment of ringworm by Cassia Lata. British Med. Journal, Feb. 3, 1877.

FOULIS (8) found that the fresh leaves of the Cassia vigorously

* The New York price is $2 per ounce wholesale.

rubbed over the affected area, and the expressed juice left to dry on, very useful in Indian ringworm.

Fox (9), in reply to Foulis, says that he used the cassia ten years ago, and that as a result of his experiment, was led to regard the remedy as of some value in ringworm, but offering no advantages over paraciticides in more common use. He further says he has arrived at the same conclusion concerning goa powder.

10. **Dobbie.**—Treatment of ringworm by the tincture of perchloride of iron. British Med. Journal, Feb. 10, 1877.

Dobbie (10) says that he has tried the tincture of iron in a number of cases with most satisfactory results, sometimes one application being sufficient to effect a complete cure.

11. **Ritchie.**—Note on the treatment of pityriasi versicolor. Edinburgh Med. Journal, January, 1877.

Ritchie (11) recommends that the skin be first washed with soap and water to free it from grease, and afterward bathed with a mixture of equal parts of acetic acid and glycerine, and also that the clothes next the body be washed with vinegar and water. He likewise found this application successful in a case of onychomycosis depending on the *microsposon furfur*. In this case he also found on the scalp a yellowish scurf which contained the same fungus.

12. **Thin.**—Some remarks on the eczema marginatum of Hebra. The Practitioner, January, 1877.

Thin (12) reports a case characterized by an annular eruption upon the thigh, shoulder, and chin ; the rings on the shoulder and thigh being formed by small nodules, and the curved line on the chin forming a continuous reddened elevation. The disease had been acquired in the East, but was apparently cured by vigorous applications of "modified Wilkinson's ointment." A few months later a relapse was cured with goa powder. A year later a second relapse defied repeated applications of goa. In discussing the subject of eczema marginatum the writer says that he does not believe that the disease so called is a mixture of eczema and trichophytosis, but fails to state whether he believes that it is either of these affections pure and simple. He suggests the possibility of there being some other disease *sui generis*. He further says: "I am one of those who believe that our knowledge of the fungi which produce some skin diseases, and the conditions under which they act, is not sufficient to warrant our rejecting unconditionally the evidence of a distinct group of symptoms, and a special development and history." The article on the whole is a little obscure, and would seem to have been written with a view to conceal rather than reveal the writer's opinions upon the subject.

13. **Nystrom.**—Note sur la nature de la pelade ou alopécie areata. Annales de Derm. et de Syph. An. VII. No. 6.

In 1874 Malassez announced the discovery of peculiar fungus found in connection with alopecia areata.

Nystrom (12) has found the same fungus infesting a towel hanging in the corner of his room, and names it quite appropriately "Champignon des cerviettes," and rejects the idea of the parasitic nature of the disease in question.

II.

SYPHILIS AND VENEREAL DISEASES.

GENERAL QUESTIONS IN SYPHILIS, THERAPEUSIS, ETC.

BY R. W. TAYLOR, M. D.

THE TREATMENT OF SYPHILIS.

1. **Bamberger, H.**—On the hypodermic use of soluble albuminate of mercury. Wiener Med. Wochenschrift, No. 11, 1876.

2. **Bamberger, H.**—Supplementary observation on the production of albuminate of mercury. Wiener Med. Wochenschrift, No. 14, 1876.

3. **Bamberger.**—Mercuric peptone. Wiener Med. Wochensch., 44, 1876, page 1450.

4. **Grunfield, J.**—On the hypodermic injection of soluble albuminate of mercury. Wiener Med. Presse, No. 35, 36 and 38, 1876.

5. **Hamburger.**—Observations on the production of soluble albuminate of mercury. Wiener Med. Wochenschrift, No. 14, 1876.

6. **Neumann, J.**—On subcutaneous injections of mercury in syphilis. Wiener Med. Wochenschrift, 46, 1876.

7. **Lewin, G.**—Observations on the treatment of syphilis by means of hypodermic injections of corrosive sublimate. Berliner Klin. Wochenschrift, No. 47, 1876.

8. **Thaon, L.**—Injections of mercury for syphilis. Progrés Medical, No. 39, 1876.

9. **Padova, C.**—On the cure of constitutional syphilis by mean s of subcutaneous injections of a mercurial preparation. Giornale Italiano delle Malattie Veneree e della Pelle. April, 1876.

10. **Kolluker, Th.**—On the treatment of syphilis by subcutaneous calomel injections. Centralblatt für Chirurgie, No. 7, 1877.

11. **Gschirhackl.**—On the practical application of several sublimate preparations for hypodermic injection. Wiener Med. Presse, 51, 1876.

12. **Kratschmer.**—Preparations of corrosive sublimate for subcutaneous injection. Wein. Med. Wochen, Nov. 18 and 25, 1876.

13. **Kammerer.**—Upon the medicinal mode of action of iodide of potassium. Virchow's Archiv., B. 59, Heft 3 and 4. (Vierteljahresschrift fur Dermatologie und Syphilis, Heft. 2, 1876.)

14. **Gamberini, P.**—Report of a decennium of clinical syphilography in the St. Orsola Hospital of Bologna. Giornale Ital. delle Mal. Ven. e della Pelle, 1875, and (Rundschau, September, 1876).

15. **Longhi, G.**—The tincture of tayuya in syphilis. Gaz. Med. Italiana Lombardia, Nov. 25, 1876, and (Chicago Med. Journal and Examiner, Jan. 1877).

16. **Galassi, R.**—Tincture of Tayuya, as used in the Hospital St. Orsola of Bologna. Giornale Ital. del Mal. Ven. e della Pelle, Oct., 1876.

17. **Druhen, V.**—Iodide of ammonium in syphilis and scrofula. Thèse de Paris, No. 265, 1875 (Rev. des Sci. Med., p. 241, Jan. 15, 1876).

18. **Hofmeister.**—Combined inunction and cold water treatment in syphilis. Pester Med. Chir. 18, 1876. (Rundschau, Dec., 1876.)

19. **Horteloup.**—Fumigations of calomel in the treatment of syphilis. Brochure, Paris, 1876.

20. **Horteloup.**—Treatment of syphilis; syphilis not treated for two and a half years; papulo hypertrophic syphilide. Annales de Dermatologie et de Syphiligraphie, Tome 7, No. 3, 1876.

21. **Longworth, L. R.**—On some open questions in the treatment of syphilis. Clinic, June 5, 1876.

22. **Olioli Antonio.**—On the use of proto-iodide of mercury in the treatment of syphilis. Ann. Univers., Vol. 232, June, 1875.

23. **Pagello, P.**—Syphilitic epithelioma of the tongue cured by hypodermic injections of calomel. Gaz. Lombard, Ital. Med. 25, 1876.

24. **Pedrelli, M.**—Chlorate of potassa and mercury. Brochure, Bologna, 1876.

25. **Proksch, J. R.**—The sublimate of mercury cure in syphilis. Brochure, Vienna, 1876.

26. **Sigmund, C.**—Formula used in the Vienna University Clinic for syphilitics. Vienna, 1876.

27. **Sigmund.**—On the means and methods of local applicaons in syphilis. Wiener Med. Wochenschrift, 5, 8, 17, 1876.

28. **Sigmund, C.**—New methods of the treatment of syphilis. Wiener Klinik, Oct., 1876 (Centralblatt für Chiren, No. 1, 1877.)

29. **Schuster.**—On the treatment of syphilitic bone affections. Vierteljahresschrift fur Dermatologie und Syphilis. Heft. 2, 1876.

30. **Taylor, R. W.**—The treatment of syphilis. New York Medical Record, p. 49, Jan. 22, 1876.

31. **Thiry.**—On the use of mercury in the treatment of syphilis in relation to the doctrines of Hermann of Vienna. Press. Med. Belge., xxvii. 37, 1876.

Attention has been called prominently, within the past year, to the hypodermic treatment of syphilis chiefly through the articles (1, 2, 3) of BAMBERGER, of Vienna. This writer has proposed both an albuminate of mercury and a mercuric peptone instead of the usual bi-chloride solution. Several years ago a chloro-albuminate of mercury was proposed, for about the same reasons as are offered by Bamberger, by Staub of Strasbourg; still the former says nothing of the article of the latter, and claims originality for his solution. It is surprising to us that he was not familiar with Staub's pamphlet, as it is easily accessible to any one desiring it.

Bamberger really adds nothing new to our knowledge of this

treatment, and his communication is interesting simply in containing minute directions as to how the mercurial salt is prepared, and also in advancing again claims already made. His papers contain a great deal of rather complex detail as to the manner of preparing the soluble albuminate of mercury. This compound is insoluble in water, but is, when fresh, readily dissolved by a moderately concentrated solution of sodium chloride. Such a solution has a neutral and very faint alkaline reaction, and behaves towards nitric acid, tannin, potassium ferro-cyanide, alcohol, and heat exactly as a solution of ordinary serum albumen, but acetic and tribasic phosphoric acid precipitate it completely.* If a solution of mercuric chloride (corrosive sublimate) be added to an albuminous liquid, mercuric albuminate is thrown down; on transferring this to a filter, allowing to drain and washing, it will be found to be much less soluble in solution of sodium chloride; indeed the diminution of solubility is in direct ratio to the amount of exposure and washing of the precipitate. The usual albuminous fluids when precipitated with an insufficient quality of mercuric chloride, still show traces of mercury in the filtrate, owing to the fact that the small quantity of accompanying chloride keeps some of the mercuric albuminate in solution. Without entering into a detail of the various preliminary experiments, it will be sufficient to state here, that it was necessary to prepare a solution absolutely free from mercuric chloride, and at the same time of such a strength in mercuric albuminate as would be most convenient for various degrees of dilution. The first point to be attended to is the preparation of a clear solution of albumen. This may be effected by freeing the white of hens' eggs from its membranes, diluting with 1½ parts of water, straining through muslin and then filtering through glass-wool (or through asbestos). In this manner a clear, or at most slightly opalescent solution is obtained.

The strength of the solution of mercuric albuminate is intended to be 0.010 gm. (0.154 grs. or nearly 1-7 gr.) in 1 cc. (16.3 min.;) and the solution itself is prepared as follows:

To 100 cc. of a filtered solution of white of egg (containing 40 cc. of albumen and 60 cc. of water) there are added 60 cc. of a solution of mercuric chloride (containing 5 per cent., or 3 gm. $HgCl_2$), and 60 cc. of a solution of sodium chloride (containing 20 per cent., or 12 gm. NaCl); finally 80 gm. distilled water are added, which brings the bulk of the solution up to 300 gm., containing 0.010 $HgCl_2$ in every cubic-centimetre. [A solution of mercuric albuminate, containing 1-7 gr. in 15 minims—the amount intended for one injection, and calculated upon American weights and measures—would be obtained by adding to 3 fl. oz. of filtered solution of white of egg (containing 1 1-5 fl. oz. of the latter), a solution of 41 grains of mercuric chloride in 864 minims of water; to the mixed solutions, containing the precipitated mercuric albuminate, a solution of sodium chloride, measuring 864 minims and

* This is not the case with serum albumen.

containing 164 grs. NaCl is added, and finally enough water to make the bulk of the solution measure 9 fl. oz.]

In regard to the keeping qualities of the solution, Prof. Bamberger had some doubts at first, but found afterwards that samples of the solution which had stood in a heated room during winter had undergone no change. In some cases, however, especially where an excess of albumen had been employed, a small white deposit, chiefly of calomel, was found to have taken place. In such a case it is only necessary to pour off the clear liquid, or to filter, as the real percentage of mercury has not been notably diminished.

In an article published subsequently (4) Dr. E. W. Hamburger suggests a few modifications which are the results of some experiments made with this preparation. The slowness with which the albumen, even when diluted, passes through the filter, and its opalescence are due to precipitable albumen which should be removed by the careful addition of an acid. To determine the exact quantity of the latter necessary, Prof. Huppert's method is recommended, which is as follows:

The well beaten white of egg is diluted with 1½ volumes of water and strained through muslin. A small quantity of the filtrate is now measured off, diluted to 10 volumes, and quickly filtered through one or more plaited filters. This filtrate is still somewhat muddy. Measured portions of this, say 10 cc., are placed into test-tubes, and to each in succession is added dilute 0.1 per cent. hydrochloric acid, increasing by a fixed measure for each test-tube—*e. g.*, 0.1 cc. in No. 1., 0.2 cc. in No. 2., 0.3 cc. in No. 3., etc. It will be found that the opalescence in most of these tubes will be stronger than in the unacidified liquid. This opalescence increases in the various tubes in proportion to the acid added to a certain point, from which it again decreases, and finally, when too much acid has been added, it disappears altogether. The portion which has the most decided opalescence and the most copious flaky precipitate determines the proper quantity of acid. Supposing 0.2 cc. of acid had been used to produce the first appearance of clouding, and 1 cc. had afterwards been consumed until it had become again clear, that portion to which 0.6 cc. of acid was added would then show the largest precipitate. The original white of egg solution is now measured without further dilution, and to every 10 volumes of it the ascertained quantity (0.6 cc.) of a 1 per cent. (that is 10 times as concentrated) acid is added. This liquid now may be filtered rapidly and perfectly clear. To the filtrate is added an equivalent amount of sodic carbonate whereby the alkaline reaction is restored.

Another difficulty occurs in the precipitation of the albumen by corrosive sublimate. It being important to precipitate the albumen as nearly as possible, without however introducing even a trace of an excess of corrosive sublimate, a method of control is necessary. For this purpose, the author recommends sodium carbonate. A drop of the mixture containing the mercuric albuminate in suspension is introduced into a solution of sodium carbonate (or a drop of the

former placed upon a few drops of the latter on a glass plate) and the precipitate will remain white, as long as corrosive sublimate is not present in excess. When the latter is the case, the color of the precipitate will be immediately yellow, reddish, or brown. A small portion of the albumen solution is triturated with a corrosive sublimate solution of known strength, and the exact saturating point determined. In carrying out the subsequent precipitation, the sublimate solution is added 0.2 cc. short.

By a later communcation we learn that the difficulty of preparing a clear and stable solution of the albuminate of mercury, has led Bamberger to replace the albumen by peptone. This latter body is easily soluble in water, resists the effects of heat, alkalies and salts, may be easily filtered, and forms a compound with mercury without difficulty. To prepare the latter, it is necessary to first make a solution of mercuric chloride (corrosive sublimate) of exactly five per cent, and a solution of sodium chloride of twenty per cent, one gramme of meat-peptone is dissolved in 50 cc. of water, and 20 cc. of the mercuric chloride solution are added. This produces a cloudiness, which is removed by the further addition of 15-16 cc. of the sodium chloride solution. The finished liquid contains one per cent of mercuric peptone. The results of all trials which have thus far been made with this preparation are very satisfactory.

The advances thus made in the treatment of syphilis are, that in place of the bichloride of mercury, and calomel, we have a soluble salt of mercury much less liable to produce local irritation ; fully as rapid, if not more so, in its effects, and certainly more readily assimilable in the circulation than any other. It is, however, as we have said, but just to Staub, to give him the credit of having first proposed the preparation of which, in truth, this is simply a modification.

GRUNFELD (4) has used Bamberger's solution upon syphilitic dispensary patients. He injected 1 grm. of the solution (0.01 Hydralb.) The pain and induration were slight and disappeared quickly, and no abscesses were observed. He prefers the albuminate of mercury to corrosive chloride for the hypodermic method.

NEUMANN (5) read a paper on the subcutaneous use of the albuminate of mercury before K. K. Medical Society of Vienna. He prefers this compound to any other preparation of mercury as being more readily assimilated into the economy, and very much less liable to induce local reaction, as he had not seen abscesses or sloughing, nor those hard lasting indurations often left by the bichloride injections. He made comparative trials on the same person with solution of mercuric albuminate, mercuric peptone and corrosive sublimate, and found that the first caused much less reaction than the others did ; of course there is some pain induced, but it is very much mitigated, even less than when morphia is also combined. Neumann also gave the result of his experiments with peptone. This is a white amorphous body soluble in almost any proportion of water. It causes very little pain and produces less

reaction than the albuminate. From twenty to fifty injections were required to cause the disappearance of the various manifestations of syphilis. Neumann found that the vesicular, papular and squamous syphilides disappeared most rapidly; one case only of chronic macular syphilide required fifty injections. The injections used before the appearance of general manifestations did not prevent them. Psoriasis palmaris and plantaris were quickly cured, while affections of the mucous membranes, grouped tubercular syphilides and gummata required a greater number of injections. Neumann is uncertain as to the effect of the injections of the albuminate of mercury on iritis, as in one case (double iritis) he had noticed little or no effect. In one case he had injected 3 centigrammes when he was obliged to desist owing to swelling at the injected point, œdema of the eyelid. It seems almost incredible that any one would dare to use these injections in such delicate parts. Lewin derived marked benefit in iritis from injections of corrosive sublimate, as also has the reporter in later experiences than those detailed in his article on the treatment of syphilis by hypodermic injections of corrosive sublimate. (*Medical Gazette*, 1871, Rep.) NEUMANN used the injections once and sometimes twice daily without observing toxic effects. Stomatitis occurred twice after, respectively, seven and fifteen injections. The only preventive measures were the careful cleansing of the mouth. Relapses were not prevented, and the time was too short to say whether they were deferred. Finally, the advantages, according to Neumann, of this treatment are: slight reaction, general and local, such symptoms as increased frequency of pulse, sleeplessness, elevation of temperature, diarrhœa and stomatitis not being produced; smallness and accuracy of dose; cleanliness of application; rapidity of cure, and rapid elimination of the mercury from the system.

The various articles recently published as to the value of the albuminate of mercury have called forth from LEWIN (7) an earnest communication renewing his claims for the value of the bichloride of mercury. He says:

During the eleven years past, almost all of the patients affected with constitutional syphilis who have come under my care have been treated with the injections of corrosive sublimate. The number has been on an average from twelve to thirteen hundred each year, making a total of nearly fourteen thousand for the eleven years. The number of injections necessary has been as a rule twenty-five, and of all the patients about one-twentieth only have suffered from abscesses, which, however, have not been so extensive as to cause them to remain in bed. Then again, abscesses have never occurred unless the person giving them had neglected to take the necessary precautions. Though the injections cause severe pain, the occurrence is so rare that it cannot be urged as an objection against the method. On the other hand, the results of treatment are so favorable that I do not hesitate to recommend it in every case. Bamberger himself admits that the curative effec

is surprisingly rapid and the statistics which follow will confirm his assertion. These figures are based upon the reports of the Charity Hospital of Berlin, and they furnish a tolerably exact indication of the frequence of the cases of syphilis in a certain class of the population, a frequence of which we have observed the importance during a considerable time. In order to form a just idea of the results of the treatment, I have compared the number of syphilitic prostitutes treated in my department since the introduction of the method by me in 1865 to this time, with those treated in the same period by other methods. The comparison demonstrates not only that the duration of treatment is shortened by the injections and the relapses are much less frequent. From 1855 to 1865, the average time passed by each patient in the hospital was ten weeks. While since 1865 it has been only four weeks. The number of relapses by the old method was eighty per cent, while by the injection treatment it has only been forty per cent. The same comparison obtains in the case of patients treated before and after 1875. In 1855 there were from five to 600,000 inhabitants in Berlin, and the number of syphilitics under treatment was daily 150 to 170. To-day it is only from 100 to 120, while had it increased according to the increase on the population it would be over three hundred. Further, the gravity of the relapses is much diminished, and I have not observed a serious case of syphilis in a prostitute, and my colleagues inform me that there has not been a single case of visceral syphilis since the adoption of the treatment. It must be remembered that the treatment to be very efficacious should not be limited to a few weeks, but should be prolonged for a year or more than that.

Kölliker (10) publishes a brief communication upon the treatment of syphilis by subcutaneous calomel injections, based on experiences made in Rinecker's Clinic in Würsburgh. The lateral parts of the body were selected for the treatment, avoiding the extremities. The formula was :—

℞ Calomel, 3.0.
M Glycerine, 30.0.

To be kept in a dark bottle. In the beginning he injected 0.2, and later 0.1, 0.05 for adults, while in children he used 0.025—0.03. In early observations he injected every ten or fourteen days, later every four or five days. As an average six injections were used in a given case. In many the local reaction was slight, but abscesses did occur, which, however, healed kindly. Stomatitis was not frequently produced, and was mild, and generally the nutrition of the patient was improved and his weight increased. He thus treated 46 cases: papulo-squamous, with condytomata, 36 cases; gummous syphilis, 4; and 6 cases of hereditary syphilis. He found particular benefit in cases of the initial sclerosis, in early cutaneous and mucous membrane lesions in bone and gummous affections of the late period. Likewise the treatment was beneficial for pregnant women and children. His observations are of too recent date

to allow him to judge as to the prevention of relapses. The treatment is to be preferred for the reasons:—1. That it is easy of administration and allows the patient to go about. 2. That it does not impair the general nutrition but rather improves it. It is indicated in cases which do not enter a hospital (Bei ambulanter Behandlung der Syphilis): in those in which inunctions cause mercurial eczema, and those who have a tendency to stomatitis: also in cases in which, owing to the number of ulcerations, inunctions are contra-indicated and in anæmic and weak persons in order to avoid disturbances of the gastro-intestinal canal.

KAMMERER (13) gives the result of his studies and experiments upon the action of iodide of potassium in the economy in an elaborate paper, which contains much minute chemical detail, of theoretical rather than practical value. He explains the action of this agent when administered internally by its decomposition by ozonized oxygen and carbonic acid. Ozone causes marked separation of iodine from solutions of potass. iod., upon which fact is based the employment of potassium iodide starch-paste paper as a delicate reagent for ozone. On the other hand, Struve asserts that a very dilute watery solution of potassii iodidum is decomposed into hydriodic acid, and into acid potassium carbonate by carbonic acid, and free hydriodic acid is readily decomposed into iodine and water by non-ozonized oxygen. By these assertions K. explains the action resulting from the internal administration of potass. iod. as follows: The drug passes from the stomach into the blood unchanged, because neither the much diluted muriatic acid of the stomach nor the contents of the alimentary canal (albuminous matters, sugar, starch, etc.,) have the power of decomposing it. The great amount of carbonic acid continually generated in the blood, as well as the high pressure existing in the vessels, cause its decomposition into hydriodic acid and bi-carbonate of potassium, the first being decomposed into free iodine and water by the oxygen of the blood. If, for any cause the decomposition of the potass. iod. by the carbonic acid did not take place, the action of the oxygen of the blood alone (which closely resembles that of ozone) would liberate iodine from potass. iod., thus permitting the action of the latter to be traced to the well known and easily explicable action of free iodine. As to the action of the liberated iodine upon the constituents of the blood, an influence upon its organic component parts cannot be assumed, since on one hand, as the author has found, the alkaline bicarbonate suffers decomposition, and on the other hand a reaction might take place between the potassium phosphate and the iodine by the formation of low iodic acid combinations (subiodic acid), the latter being an easily reduceable, and consequently readily oxidizable substance producing a destruction (combustion) of organic matters, and liberation of iodine—upon which would then devolve the essential action. Iodine would act differently towards organic constituents of the blood, for by withdrawing their hydrogen it would cause a destruction of their complex

organic combinations into simpler ones, a part of which being easily oxidizable would be burned into carbonic acid and water, or would be removed from the body by the various emunctories. However, the iodide must be considered as being transformed into hydriodic acid after its first reaction; this to be again decomposed by oxygen and free iodine, again to act upon the protoplasmic matters as detailed above, and this process to be repeated until the iodine is eliminated by the organs of excretion. Thus one and the same molecule of iodine has the power of destroying a disproportionately great number of the molecules of organic substances. Now as to the metamorphosis of the other products of decomposition, if it be permissible to assume the decomposition of potass. iod. (recently rendered questionable by Gorup–Besanez), then the conversion of potassium into potass. carbonate or bicarbonate becomes indubitable. If, however, it be assumed that the decomposition of potass. iod. is caused by oxygen, then the potassium must enter into a combination upon which iodine has no action, consequently potassium oxide is not produced, but potassium per-oxide. Thus another substance besides the iodine would be formed which would easily oxidize organic substances, being reduced by them into potassium, which would combine with carbonic acid to form potassium carbonate. Thus the actions of potassium iodidum, essentially manifested in elevation of the temperature of the blood, and in emaciation, can be explained according to Kämmerer's hypotheses by an increase of the combustion in the blood.

Professor GAMBERINI (14) presents a table showing the number of patients suffering from venereal diseases treated by him during ten years in the St. Orsola Hospital, in Bologna. He also describes his methods of treatment of the various affections, which, though not being strikingly new, are interesting, as presenting the results of the vast experience of the celebrated Italian Syphilographer. His cases are as follows:—

	Total.	Cured.	Improved.	Dead.
Blennorrhagia - - - - - - -	621	571	49	1
Chancroidal Ulcers - - - - -	1377	1350	27	. . . .
Adenitis - - - - - - - - - -	376	56	17	3
Epididimitis Blennorrhagic - -	92	90	2	. . . .
Arthritis Blennorrhagic - - -	20	18	2	. . . .
Total - - - - -	2486	2385	97	4
Syphilitic Chancres in 3 years -	58	44	13	1
Secondary Syphilides in 10 years	1142	1075	61	6
Tertiary Syphilides in 10 years -	939	834	87	18
Total - - - - -	4625	4338	258	29

These figures are strikingly interesting. It will appear curious to American observers that the chancroidal ulcer occurred twice as frequently as did blennorrhagia, and that the testicular and articular complications of the latter affection were so large, being respectively 92 and 20 to 621. It is very probable that only the more severe cases of blennorrhagia were admitted to the hospital, while milder ones were treated as out patients. Gamberini does not advocate the abortive treatment of blennorrhagia, but recommends anti-phlogistics and derivatives. He orders purgative pills, such as of gamboge, in such quantities as to produce several stools daily, and allows the patient to inject with tepid water three or four times a day. Later on he substitutes the balsam of copaiba for the purgative, and when the discharge becomes scanty he adds 4 to 6 drops of lemon juice to the tepid water of each injection. This failing, he uses astringents, giving preference to those of vegetable origin. He warns the patient against the violent squeezing so often practised to ascertain the progress of cure, and does not allow them to use lint over the meatus. For pain, chordee-spasm, he uses potass. bromid., lupuline, camphor, cold applications and morphia subcutaneously. Gamberini is disposed to think that there is both a specific and simple form of blennorrhagia, and that ophthalmia and arthritis, which are rare, are produced only by the former variety. Epididimitis complicated by hydrocele is treated by punctures, and when the trouble subsides mild measures only must be employed. It should be thoroughly cured, but the iodides are not beneficial for it, as they irritate the urethral mucous membrane. G. admits gonorrhœal rheumatism, and explains its unfrequent occurrence by the fact of it being the result only of specific gonorrhœa. For chancroids he advises mild treatment as not tending to inflame the ganglia, and uses iodoform in glycerine (1 to 8), and does not advise mercurials for hard chancre with the view of preventing secondary manifestations. He is a believer in the doctrine of the mixed chancre ; and in the treatment of phagedena is opposed to the use of mercury externally or internally. He speaks of having seen venereal warts of syphilitic origin and of their being cured by appropriate treatment. He divides the syphilides into the hyperæmic and hyperplastic, or secondary, and the neoplastic or tertiary forms, and thinks that pemphigus and rupia syphilitica are due to decomposition of the liquids and necrobrosis of the solids produced by the profound cachexia. In the treatment of syphilis he uses mercury in the secondary and mercury and iodine in the tertiary stage, and sometimes employs the vapor bath, but is not an advocate of the subcutaneous method. In the neoplastic syphilides he uses the following prescription :—

℞. Sodii Iodidi, gramme, i.
Hyd. Bin.-Iodidi, centigram, i.
Aq. Distell, gramme, 90.
Sacch. Alb., gramme, 8.
M.

This is to be taken in three parts daily and may be increased as the stomach will allow and the case requires. In osteal gummata he speaks of percussion as imparting, even in slight cases, an altered tone from that offered by healthy tissue, and says that pain is produced thereby when firmer pressure upon normal tissue would produce none. He specifies as distinguishing points between cancerous and syphilitic nodules of the tongue, the multiplicity and deep situation, absence of tenderness when not in an ulcerated condition of the latter, which soften from the centre rather than the periphery. Gamberini believes that a mercurial treatment will protect a patient from tertiary manifestations, and he does not think that syphilis can cause a second dyscrasia such as scrofula. In his experience syphilitic fever has a remittent, almost intermittent type, and he has rarely found the temperature to rise above 40°. The usual symptoms of fever, such as thirst and sweating, are absent, and quinine has no effect upon it while it is controlled by mercury. It must be constantly remembered that it may be due to some intercurrent affection in which event the mercurial should be discontinued. He has observed the fever more frequently in pustular, vesicular and tertiary forms than in others.

Within two years, a new anti-syphilitic remedy, the *tincture tayuya*, has been proposed, and recently two articles detailing its use and effects, have been published. The first article by Longhi, (15) begins with the details of two cases which were not syphilitic; the third observation of the author concerned the case of a child three months old, who had been suckled by a nurse after the latter had been infected with syphilis by a former nursling. The infant exhibited over the groin and external genitalia, ten or twelve papules, of the size of large peas, rounded in contour, and covered with a whitish offensive secretion—these lesions being implanted upon an integument which was considerably reddened. Upon the lips of the mouth were several small, whitish ulcers with reddened borders. Similar sores were also found upon the tongue. The diagnosis was made of papular syphilis of the genitals and mouth. Three teaspoonfuls daily were given of a solution containing one hundred and fifty drops of the dilute tincture of tayuya (Ubicini Brothers) in eight hundred grammes of water. The parts were bathed three or four times daily in the same solution. In a fortnight, the cure was complete, the author expressing a regret that he could not have tested the treatment further, and have made continued observation of the case.

The fourth case of the series is that of a patient thirty-six years old, who had had repeated attacks of gonorrhœa, and a gleety discharge for fifteen years. During this period he had suffered frequently from articular and muscular pains, which were accompanied by swellings upon the manubrium of the sternum, the occipital and parietal bones, the dorsal vertebræ, and ribs. There had been also copper-colored blotches of the surface—one upon the left pectoral region being as large as the hand of an adult. He had vainly tried many kinds of empirical treatment, not neglecting

the use of mercury, iodine, hot baths, etc. On the first of September he could hardly move in bed; the lateral movements of the neck were evidently accomplished only with difficulty, and all sudden motions (sneezing, coughing, etc.) were excessively painful. The bones were enlarged, as described above; while the eruption and gleety discharge observed did not seem of recent development. A diagnosis was established of macular syphilide, with syphilitic periostitis and arthritis. For several preceding months the patient had taken no medicine; but in July he had been subjected to a hydrotherapy, which left him in a more unfavorable condition than at first. On the 12th of September the treatment by tayuya was begun, in doses of 15 drops of the dilute tincture in two hundred grammes of water. In five days the patient could tolerate forty drops in the same quantity, which were continued till September 20th. On that day he took eighteen drops of the mother tincture, increased to forty of the same by October 1st, then slight abdominal pain was complained of, when but thirty-five drops of the strong tincture were ordered to be employed. The patient had now for several days stated that his pains were by no means as severe as they were formerly; the osseous enlargements had well nigh disappeared, and also the cutaneous maculæ, with the exception of that upon the breast, which was smaller by two-thirds than at the beginning of treatment; the gleet had completely disappeared. Some recurrence of pain occurred after drinking half a litre of wine with his companions, when the dose was again increased to forty drops. On October 5th, commercial tincture was substituted for that employed, in eighty drops daily (the mother tincture being exhausted), and the latter dose gradually reduced to fifty drops by November 10th, the date of the writer's last observation. All the osseous enlargements have disappeared; but the pectoral macule is still visible, and the pain only appears for a day after drinking wine, becoming constipated, or on exposure to the cold.

The second article by GALASSI (16) gives the experience of the author in Prof. Gamberini's service in Bologna, in three cases of early secondary syphilis in which the tincture acted well. He also speaks of a severe case of scrofulous inflammation of the face, which was also cured by it.

HOFMEISTER (18) advocates a combination treatment of cold water and inunctions in syphilis. He thinks that, during the cold water treatment, aliments and medicines are more completely digested and assimilated, and that by this means favorable results are produced by means of a reduced quantity of medicine. Less mercury therefore may be employed in syphilis, and if a cumulative effect is produced it can be readily cast off by the treatment in consequence of the increased excretion and secretion. Furthermore, the regimen indicated in the cold water treatment is such as materially facilitates metamorphosis.

The advantages of the treatment are: (1) A material gain in time. (2) The patient can follow his avocation and has not to

fear the influence of cold. (3) No ptyalism results, hence there are no interruptions to the treatment.

SIGMUND (27) has published within a year three articles on the medicinal agents used locally in syphilis, which, however, contain nothing particularly new. In the first he speaks of potass. chlor., plumbi acet., corrosive sublimate, sulphate copper, etc. In the second article he treats of the various preparations of iodine and bromine, and of iodoform, as well as salicylic acid, phenol, thymol, etc. The latter, he thinks, possesses no particular value. In the third article he speaks of lint, oakum, etc. He has further published in the *Wiener Klinik* (28) a long lecture on the new methods of treatment of syphilis, of which we give the following summary as containing its essential points:

Carbolic and salicylic acids, iodoform and oleate of mercury, are the new agents in the therapeutics of syphilis, added within ten years, whereas in new methods of using old remedies, there are the suppositories of mercurial ointment chloro-natrium, sublimate solution, and solution of albuminate of mercury, the inhalation of corrosive sublimate, several preparations of mercury for subcutaneous injection, and finally the combination of the inunction treatment with baths (balneotherapy). Carbolic acid in a one per cent solution as a detergent has been used for wounds and ulcers, and as injection for the vagina and rectum, also in the throat and nasal cavities. Carbolic oil and carbolic paste have proved useful for superficial cauterization of diphtheritic wounds and ulcers. Salicylic acid and thymol have been used in place of carbolic acid, but they possess no advantages whatever over the latter. Sigmund has not seen any striking results from the internal use of iodoform, but he thinks well of it for external use, owing to its comparatively harmless nature, in cases where its smell does not contra-indicate its employment. Oleate of mercury is only of benefit in the simple and milder order of cases.

Suppositories of blue ointment have proved very beneficial, but they have shown a great tendency to produce symptoms of hydrargyrosis, particularly upon the intestinal canal, so much so that scarcely one-fifth of the number of patients could use them through the systematic course of treatment. The combination of corrosive sublimate with chloride of sodium (0.1 sublimat, 20 chlornatrium : 200, 0 aq.) used internally has proved of service in mild forms of syphilis, and in cases of weak constitution. Externally the sublimate has worked well for psoriasis palmaris and plantaris, and is especially preferable for cauterization of papules, fissures and erosions (of the mouth, pharynx, tongue, and lips), to nitrate of silver. The albuminate of mercury is of no particular value. As local treatment the inhalations of corrosive sublimate were especially beneficial in affections of the pharynx and larynx. For subcutaneous injections S. used the sublimate (03 : 40.0) and recommends the addition of 6.0 chloride of sodium to the solution; also bicyanide of mercury in solution, 03 : 40.0, and calomel, 0.05—0.2 : 1.0. In larger doses calomel readily causes abscesses, while

the bicyanide produces but slight local reaction. The sites of injection we gave in our last report, see Archives of Dermatology, Jan., 1877, page 176. The injections of the bicyanide and of corrosive sublimate may be made daily, while those of calomel in large doses once a week, and in smaller ones every two or three days, requiring from four to eight, to about twenty-eight of the other mercurials. With the exception of calomel these agents do not reduce the condition of nutrition. (Kölleker in Von Rienecker's Würtzburgh Clinic, on the other hand, found that calomel used subcutaneously produced its systemic effects only in a smaller number of cases.—Rep.) Of the three agents calomel acts the most quickly, and while all of them are of benefit they do not prevent relapses more certainly than do other methods. The few trials of the subcutaneous method in severe forms of syphilis (gummous and visceral), have not been satisfactory to Sigmund, who thinks that simultaneous local therapy is always necessary. He concludes that the method is only applicable to the milder forms of syphilis, and in severe cases he always relies with more certainty on the older methods. S. discusses further the treatment of syphilis in combination with balneotherapy (cold water and mineral baths), which he especially praises, and mentions Baden, near Vienna, Hall, near Linz, Achen und Kreuznach. In this case he prefers the hypodermic methods, and as indications for the treatment he mentions the co-existence of syphilis with scrofula, tuberculosis, rheumatism, gout, malarial cachexia, and scorbutus, the improper use of mercury and iodine, and unfavorable conditions of habitation, and of modes of life. The cold water treatment renders patients having a sensitive integument more rugged and less liable to catarrhs of the upper air passages, while baths containing iodine and bromine are of great value in hereditary syphilis. Sigmund mentions Ludwig's method of analysis of the secretions for mercury as being very important, and concludes his lecture with the following points which he mentions as evidence of the striking progress made in the therapeutics of syphilis within the past ten years. They are :

1. The establishing of the date at which the methodical general treatment of syphilis should be commenced.

2. Accurate rules for the treatment of pregnant women and children with syphilis.

3. The successful treatment of gummous, and in particular visceral and nervous forms of syphilis. (In some cases S. saw favorable results from mercury when iodine had already been used).

4. Suitable methods of diet and conditions of hygiene for syphilitics.

5. Active procedures in the prophylaxis of syphilis.

6. The ground work for thorough statistics of the latter.

7. A higher standard of clinical instruction and increase of scientific and literary labor in this field.

SCHUSTER (29) asserts the fact which, is now generally conceded, that syphilitic affections of the bones may appear early as

well as late in the disease. He opposes the view that mercury causes these affections, and on the contrary thinks that it, in combination with thermal waters (such as those of Aachen), is very efficacious in cases of relapse or of incomplete cure. He supports the view of Volkmann and others that local treatment is absolutely necessary, and thinks that the fever which so frequently accompanies these affections should be treated by anti-pyretics, such as quinine, salicine, and salicylate of soda.

LOCAL THERAPEUTICS OF SYPHILIS AND CHANCROIDAL ULCERS.

32. **Cheron, J.**—Treatment of syphilitic condylomata by cauterization with nitrate silver increased by the contact of metallic zinc. (Du traitement des syphilides papulo-hypertrophique par la cauterization au nitrate d'argent activée par le contact du zinc metallique.) Brochure, Paris: 1875.

33. **Doering.**—Sulphide of carbon. Pacific Med. and Surgical Journal, Oct., 1876.

34. **Hardy.**—Solution for mucous patches. (Solution contre les plaques muqueuses.) L'Union Med. du Canada, p. 471, Oct., 1876.

℞ Zinci chlorid, gr. xviij.	℞ Acid Hydrarg Nit. gr. xv.
Aqua Dest. ℥ss.	Aquæ Dest. ℥iij.
M.	M.

35. **Klink.**—Salicylic acid as a local application in chancres. "Medycyna" Tom. III. No. 33, 1875. (Viertelj. f. Derm. u. Syph. 1876, p. 279.)

36. **Molinari, G. B.**—Treatment of skin and venereal affections by scraping. (Traitement des maladies cutanées et veneriennes au moyen du raclage.) Gaz. Méd. de Paris, Nov. 25, 1876.

37. **Pavesi, C.**—Application of chloral hydrate in the prevention of venereal diseases. Giornale Italiano delle malatte veneree e della Belle. Dec., 1876.

38. **Porter, W. G.**—The treatment of chancres. Medical and Surgical Reporter, Jan. 20, 1877.

39. **Greenough, F. B.**—On the treatment of the chancroid. Boston Medical and Surgical Journal, Jan. 11, 1877.

40. **Piffard, H. G.**—On the treatment of chancroids by the actual cautery. Archives of Clinical Surgery, Nov., 1876.

41. **Piffard, H. G.**—The treatment of chancroids. Boston Medical and Surgical Journal, Jan. 25, 1876.

42. **Piffard, H. G.**—The nitrate of zinc in the treatment of venereal and other lesions. New Remedies, March, 1876.

43. **Vajda, L.**—On the use of oleate of mercury in syphilis. Rundschau, March, 1876.

44. **Weisflog.**—On the treatment of phagedenic ulcers. Virchow's Archives, B. 26. Heft. 3. Rundschau, Oct., 1876.

45. **Zeller, R.**—On the treatment of venereal diseases. Memorabilien, 5 Heft, 1875.

CHERON (32) proposes for the treatment of anal and vulvar condylomata and ulcerated syphilitic papules a treatment first used by Corradi, which consists simply in the application to the affected surfaces of a very strong solution of nitrate of silver or of its solid stick, after which the parts are gently rubbed several times with a piece of metallic zinc. The mode of action is called cathéretic, and is a chemical one, explained by the author as follows:

In cauterization with nitrate of silver, the reduction into metallic silver takes place slowly, and the modification of the tissues is due to their impregnation by that agent as well as to the physical forces developed under the influence of the chemical action produced. When to the cauterization the contact of metallic zinc is added, the chemical reaction is more energetic, since by the contact of the last metal the reduction of the silver is instantaneous, and the intensity of the physical forces developed is more considerable, consequently the modification of the organic tissues is more rapid and profound in the latter case. Cheron gives a series of statistical tables of the comparative results of treatment as follows: When simply baths inert powders were used, the patient being kept in bed, the average duration of treatment was about 53 days; when to the preceding treatment cauterization with the acid nitrate of mercury was added, it was about 30 days; whereas under the treatment here described the average length of time was less than nine days.

DOERING (33) has used the bi-sulphide of carbon extensively, and arrives at the following conclusions as to its value:

1. Sulphide of carbon is particularly useful in all ulcers showing a tendency to spread, especially if of a syphilitic nature. It ought to be applied freely at least twice a day.

2. If no beneficial effect is observed after trial with this drug for a week, in any class of ulcer, it will be useless to continue its further application.

3. It is by far the best local application thus far presented to the profession in the treatment of that large class of ulcers termed indolent or chronic.

Sulphide of carbon is a transparent, colorless, exceedingly volatile fluid, of pungent, aromatic taste and very fetid smell. The mode of application is to lightly brush the surface of the ulcer by means of a camel hair pencil, or piece of lint, and then cover the surface with some mild, unirritating powder, as subnitrate of bismuth or starch. The application generally produces severe pain, which, however, lasts but a few seconds.

MOLINARI (36) has used the skin scraper for both cutaneous and venereal lesions. A case of eczema, localized and infiltrated, was rapidly cured by means of it as well as an ulcer following frost bite. A female, aged 26, having had a syphilitic chancre, which was cured by mercurials, was attacked by vegetations on the genital organs. After they were clipped off by scissors they were finally caused to disappear entirely in a short time by scraping. A man having had indurated chancre, applied for treatment for mucous tubercles on the scrotum. After having been scraped they were dusted with calomel and were cured in fifteen days.

SYPHILIS OF THE NERVOUS SYSTEM.

BY E. C. SEGUIN, M. D.

1. **Bristowe.**—Case of probable syphilitic disease of the brain, and of the vessels of the upper extremities. Med. Times and Gaz., Feb. 10, 1877.

2. **Broadbent, W. H.**—Syphilitic affections of the brain. Lancet, Nov. 20, Dec. 2 and 9, 1876.

3. **Cayley.**—Case of left hemiopia; pain in left supra-orbital and temporal regions; two epileptiform attacks; doubtful history of syphilis, but improvement under antisyphilitic treatment. Med. Times and Gaz., Nov. 4, 1876.

4. **Charcot.**—Partial epilepsy of syphilitic origin. Le Progrès Médical, Jan. 13 and 27, 1877.

5. **Dejerine, J.**—Muscular atrophy and paraplegia in a case of early malignant syphilis. Archives de Phys. Norm. et Path., No. IV. July, August, 1876.

6 **Dreschfeld, J.**—On a case of syphilitic disease of the brain. Lancet, Feb. 24, 1877, p. 268.

7. **Duckworth.**—Paralysis of the third cranial nerve of the left side, with other paralyses from syphilitic deposit, rapidly disappearing under treatment. Med. Times and Gaz., Sept. 23, 1876.

8. **Drysdale, C.**—Syphilitic epilepsy. Free Hospital. Med. Press and Circular, July 26, 1876.

9. **Fiori.**—Syphiloma of the tubercula quadrigemina. Gaz. de R. Acad. di Med, di Torino, August, 1876. (Chicago Med. Journal and Examiner, 1876, p. 952.)

10. **Fournier, A.**—Locomotor ataxia of syphilitic origin. Gazette Méd. de Paris, Dec. 30, 1876.

11. **Homolle, G.**—Sub-acute meningomyelitis with paraplegia, happening at the end of the secondary period of syphilis. Case with autopsy. Le Progrès Méd., 1876, p. 6.

12. **Hurford, C.**—Report of a case of acute insanity ending fatally in eleven days, supposed to be due to syphilis, and of the morbid appearances found. Journ. of Men. Sc., April, 1876, p. 97.

13. **Mauriac, Ch.**—On syphilitic aphasia and right hemiplegia of an intermittent form. Gazette Hebdomadaire, April, 1876, p. 214, and Feb. 9, 1877.

14. **Mercier.**—Cerebral syphilis with coma. Paris Thesis. Archives Générales de Medecine, May, 1876.

15. **Roosa, D. B. St. J.**—Syphilis of the cochlea. N. Y. Medical Record, Nov. 18, 1876, p. 747.

16. **Smith, A. H.**—Syphilitic disease of the brain. N. Y. Pathological Society. N. Y. Medical Journal, March, 1876, p. 300.

17. **Thompson, J. W.**—Case of nervous syphilis. Nashville Journal of Medicine, Sept., 1876, p. 107.

18. **Vanderbeck.**—Gummy exudation in the cerebrum. Phila. Med. and Surg. Reporter, Sept. 9, 1876.

BRISTOW (1) relates a case of right hemiplegia and aphasia occurring in a man thirty-seven years of age. There was also obliteration of the arteries of the upper extremities without disease of the heart or great vessels. The man gave a history of syphilis, and the cerebral and brachial symptoms were thought to be due to syphilitic arteritis. Small doses of K.I. caused no improvement.

BROADBENT (2) adds to his previous valuable contributions on the subject, a careful record of ten cases of syphilis of the central nervous system. The chief symptoms which are thus produced, paralysis, anæsthesia, convulsions, ischæmia of the optic nerve, disorders of speech, and of cerebration, are well illustrated. Some of the cases are remarkable. Dr. B. believes that the lesion in cerebral syphilis is always a tertiary lesion, that it may appear as late as forty years after the initial lesion, and that it is wonderfully amenable to treatment of iodide of potassium and mercury. The doses of the former remedy used in England (ten to forty grains three times a day) are much smaller than those which we often employ here. A most interesting point is the frequency with which choked disks recover their normal aspects and sight is restored under proper treatment.

The case of CAYLEY'S (3), of multiple nerve lesions, affords a good illustration of the good effects of iodide of potassium when the syphilitic history is imperfect.

M. DEJERINE'S case (5) is one of acute myelitis of the anterior horns occurring in a syphilitic subject. He himself does not think that there was more than a coincidence in the co-existence of the two diseases.

DR. DRESCHFELD contributes a case (6) which is of the highest value, as bearing upon the new theory of the existence of psychomotor centres in the convolutions of the cerebrum. A syphilitic subject, aged thirty years, after having had various symptoms of syphilis of the nervous system, developed epilepsy with spasm beginning in the left hand and forearm. Sometimes localized spasm occurred without loss of consciousness. Death took place through phthisis. At autopsy a superficial patch of softening was found in the right ascending parietal and supra-marginal convolutions; the membranes being adherent. This part of the human brain corresponds to that portion of the monkey's brain to which Ferrier found centres for the arm.

A case is reported by FIORI (9) of peculiar convulsions, in which a cure was obtained by mercury and iodide of potassium. The diagnosis is arrived at by far-fetched comparisons of symptoms with the results of recent experimentation.

A favorable review is given (10) by the editor of the Gazette Médicale of FOURNIER'S paper. Fournier has collected 80 cases of progressive locomotor ataxia occurring in syphilitic patients, and claims that syphilis is sometimes a cause of the sclerosis of the posterior columns. He closes his essay by the following propositions: 1. In the case of an ataxic patient, it is the physician's duty to diligently inquire whether there has not been syphilitic infection.

2. The occurrence of syphilis having been satisfactorily determined, the indication to treat the syphilitic diathesis is a positive one. Experience has shown that occasionally such anti-syphilitic treatment does a great deal of good.

HURFORD'S case (12) was one of acute mania terminating fatally in a few days from exhaustion and local injuries received in struggles. There seems to be nothing to support Dr. Hurford's supposition that syphilis caused the mental disorders. In his remarks the author omits to state what, in the reviewer's opinion, is the most important lesson to be drawn from the article, viz., that proper *restraint*, according to the American plan, would probably have prevented the fatal issue. We have no right, out of respect for a noble abstract principle like that of non-restraint, to allow our patients to exhaust and bruise themselves to death.

MERCIER'S case (14) is a valuable contribution to the subject of cerebral syphilis. Three years after the occurrence of chancre, followed by roseola, mucous patches, and osteoscopic pains, there occurred headache, a dull feeling in the head, confusion of ideas, dimness of sight, and rather suddenly coma. In this comatose state there were no active symptoms such as fever, spasm, and no paralysis or anæsthesia. The optic papillæ were atrophied. Mixed treatment brought about a return to consciousness in three days. On the day when the mixed treatment was begun there were two general epileptiform convulsions. In seven weeks recovery (including that of sight) was complete.

DR. ROOSA (15) contributes four cases of disease of the cochlea (deafness, tinnitus, dizziness) occurring in syphilitic subjects, late in the second stage. In three patients cure or great amelioration was obtained by mixed treatment.

In VANDERBECK'S case (18) of cerebral symptoms in a subject of syphilis, cured by mixed treatment, the diagnosis not clearly warranted: the lesion may have been meningeal or arterial.

19. **Westphal, C.**—Syphilitic nervous diseases. Berlin Charitié-Annalen, 1876, p. 420. (Revue des Science Méd., Jan., 1877, p. 232.)

20. **Wood, H. C.**—Cerebral syphilis. Philadelphia Medical Times, Feb. 19, and March 18, 1876.

21. **Wunderlich, C.**—Syphilitic disease of the brain and spinal cord. Sammlung klin, Vorträge von Volkmann, No. 93 1876.

WESTPHAL (19) reports hæmorrhagic spinal pachimeningitis in the sacral region, compressing sacral nerves, causing paralysis of sphincter ani, anæsthesia of perinæum and sexual organs, and loss of sexual sensation. The sarum was necrosed. Death by septicæmia.

DR. WOOD (20) believes that arteritis is frequent, in syphilis of the brain and spinal cord, and that multiple lesions are often found. He is in favor of the "mixed treatment," and of potassium iodide in very large doses. The striking point of the lecture is where he advises bleeding *ad deliquim* in acute syphilitic meningitis.

Reviews and Book Notices.

A Practical Treatise on Diseases of the Skin. By Louis A. Duhring, M.D., Professor of Diseases of the Skin in the Hospital of the University of Pennsylvania; Physician to the Dispensary for Skin Diseases, Philadelphia, etc. Philadelphia: J. B. Lippincott & Co., 1877, pp. 618.

WE do not hesitate to say that in our opinion this is, in many respects, the best general treatise on Diseases of the Skin that has ever appeared in any language, certainly for the general practitioner little versed in Dermatology, and that it is one of which the American profession may well feel proud; the aim of the book is to be "concise, practical and useful," and such it really is.

Dr. Duhring has very properly abstained from making any innovations, either in nomenclature or classification, and has therefore accepted the arrangement of Hebra with some modifications, a scheme which is accepted by more students and teachers in more countries than probably any other one, and which, from the comparative failure of other methods of classification, must come into general use, for the present at least; the present work therefore will harmonize well with the studies pursued by many in Vienna and also in the large cities in this country where this nomenclature and classification are adopted.

The present work is singularly full in reference to the work of other dermatologists in this and other countries and yet the references are so cleverly interwoven that the matter is only made more interesting thereby to the reader, for it is well known that not unfrequently references obscure rather than elucidate the subject.

Many portions of the work deserve great commendation for their clearness and completeness, and want of space alone forbids calling special attention to many of them: the vegetable parasitic diseases, for instance, are most admirably presented, and the drawings of the parasites found therein are the best with which we are acquainted. It is indeed refreshing to see some new plates, and these as also the excellent ones representing the anatomy of the healthy skin, are the work of Dr. Van Harlingen, of Philadelphia, already otherwise well known to our readers. Dr. Duhring did wisely, we think, in not entering deeply into the histology of skin lesions in the present work, inasmuch as it is designed largely for practitioners, and the subject needs yet much study: for the more complete results of study thus far the student can refer to Neumann.

Among the new suggestive points we may refer to the position given to rosacea, a subject which has long disturbed the minds of dermatologists. Our author acknowledges an acne rosacea, which he

classes with ordinary acne, recognizing the element of the disorder of the sebaceous glands, but he also treats of *rosacea* alone under telangiectasis, or acquired vascular new-growths, for, as all recognize, many cases of enlarged capillaries are seen where no sebaceous disease appears, and this has caused some writers to separate acne rosacea entirely from the disorders of the sebaceous glands, wrongly we have heretofore contended.

The points for criticism in this book are very few, and we congratulate the author on the successful production of a work of such value both to the practicing physician and the specialist.

On Syphilitic Insanity; its diagnosis and prognosis (Die luetischen Psychosen in diagnostischer und prognostischer Beziehung.) By Dr. Albrecht Erlenmeyer, Neuwied, 1876, pp. 99.

THE author of this excellent little book, Dr. Erlenmeyer, is well known as the head of a private insane asylum near Coblentz, and as the author of an essay upon embolism of the cerebral arteries. His last contribution shows that he is not merely manager of an asylum, but an able physician and a good pathologist. The book is based wholly upon cases selected from his own experience, and he classifies them in three categories, or stages of cerebral syphilis. First, simple syphilitic insanity which may assume any symptomatic type (hypochondriasis, melancholia, mania), and often depends upon visceral diseases. Second, syphilitic insanity complicated with motor and sensory disturbances; such as apoplectic attacks, epileptic seizures, convulsions. This second stage may be inaugurated by maniacal fury, melancholia, delirium, or stupor. The third stage of syphilitic insanity in which a symptom group similar to that usually called general paresis is produced, impaired cerebration, high notions, paresis of cerebral nerves, of limbs, unequal pupils, and dementia.

If the true nature of the affection be recognized, Dr. Erlenmeyer believes that a cure may often be obtained in the first and second stages, and sometimes in the third. He supports this statement by some well reported cases.

With respect to pathological anatomy Dr. Erlenmeyer recognizes the tendency to multiplicity of lesions in syphilis of the nervous system. He indicates diseases of the cranial bones, the dura mater, the cerebral arteries, and the tissue of the brain. He rightly lays great stress upon the importance of diagnosing the syphilitic lesions in other organs, as the liver, intestines and lungs.

As to treatment, the author uses both mercury and iodide of potassium, as well as tonics and electricity.

This work is one which will, we hope, be largely read in the lunatic asylums of this country.

[A number of Original Articles, Reviews, and much of the Digest, already in type, are delayed until the next issue for want of space.—ED.]

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With all these facts in view, many manufacturers of saponaceous compounds have, during the past few years, essayed to prepare a "Tar Soap" which would in all respects stand the test of Medical and Chemical science. Most of these men have, through ignorance of Chemistry, or from false ideas of economy, in using inferior ingredients, utterly failed; and thus the confidence of Physicians in "Tar Soap" was for a time to a great extent lost, and the primitive Castile soap only was recognized as the official "Sapo durus," or hard soap.

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By using only the purest and most emollient of vegetable oils, and by a series of processes, wholly his own, Mr. Packer has entirely overcome these and other minor difficulties, and now offers to the profession and the public an attractive and valuable "Pine Tar Soap," which he can safely challenge the world of soap manufacturers to excel or even equal. As a great boon to those of the Medical Profession who treat cutaneous diseases, the use of this soap is earnestly and conscientiously recommended. Its curative virtues in the several diseases and symptoms mentioned in the circular which accompanies each package, are abundantly proven by numerous certificates of Physicians and others.

PACKER MANUFACTURING CO., Sole Proprietors.

P. O. Box 4885, New York.